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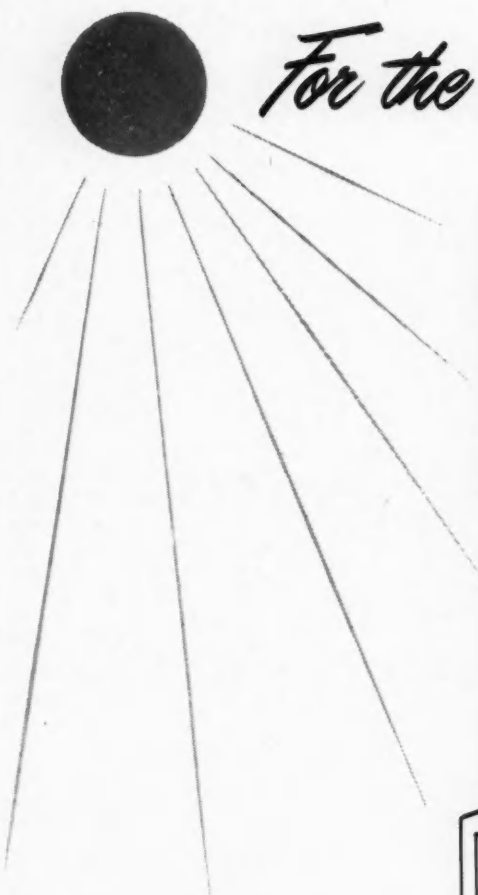
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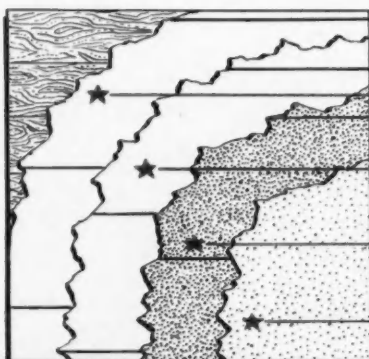


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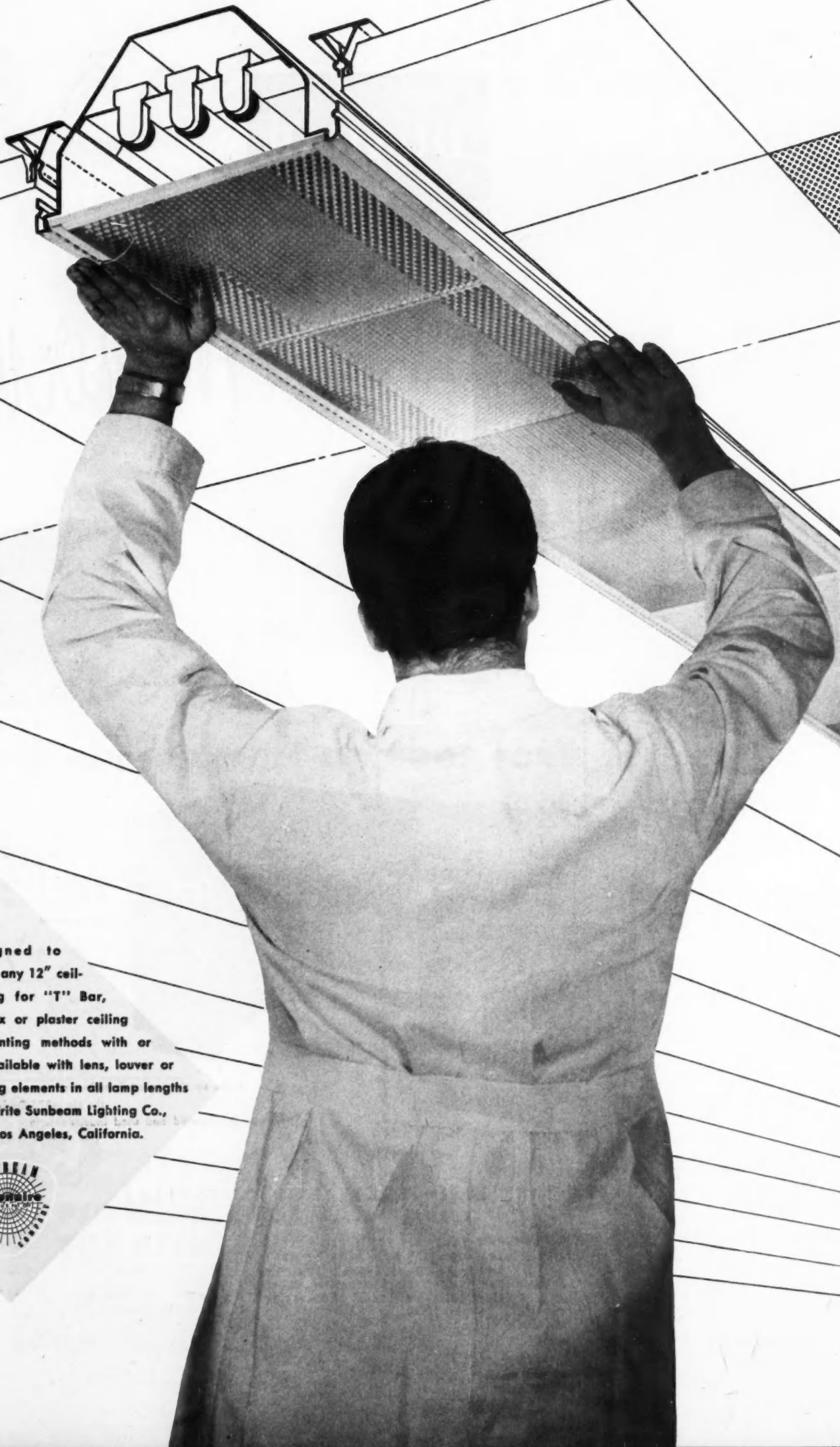


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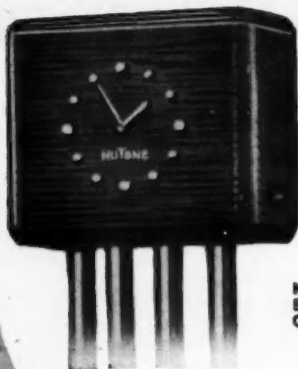
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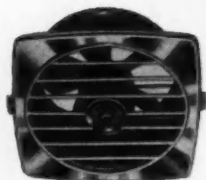
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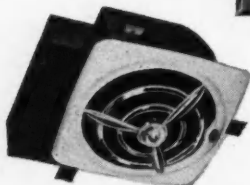


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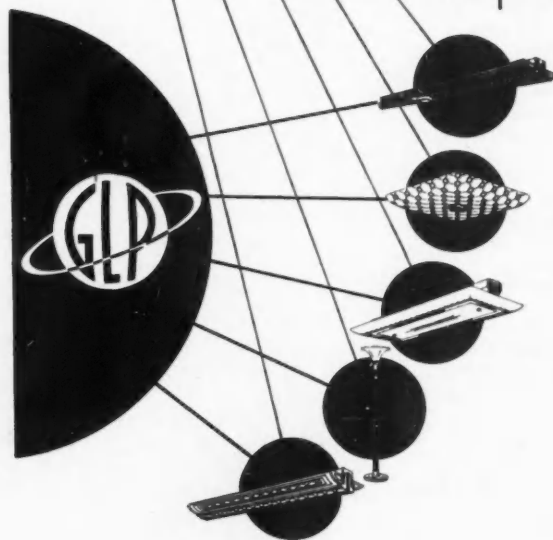
As I write the Philadelphia Symphony directed by Eugene Ormandy is shrilling out an Ormandy transcription of the *Passacaglia and Fugue in C minor* by Sebastian Bach. This follows, by transcription, thanks to CBS who have given over paying for live summer Sunday afternoon symphonic broadcasts, a transcription of a talk read by Ralph Vaughn-Williams for the BBC network on the 200th anniversary of Bach's death. The author of *National Music* argued in his gruff, countryman's manner the one side of a two-sided argument.

For blaring crude sounds intended to beat upon the ears of a mob audience insensitive to contrapuntal nuance, this recording could scarcely be improved on. It is mob-music, as rawly meaningless, as hysterical and impressive as a broadcast rant by Hitler in the original German, a mass substitute for emotion, the Hollywood Bowl extreme of a good idea gone to seed. If Bach is worth hearing at all, says the plausible argument, everybody should hear it and presumably all at once. Therefore the music must be made thicker, heavier, coarser, louder and be played in larger places. Therefore, the experts in crowd psychology added, it should be picked up by amplifiers and literally broadcast in the faces of the audience.

The music is modernized, as the hard, bright boys in the studios modernized Rostand's *Cyrano de Bergerac*, smearing the sentiment with Hollywood cliché, building up the duel until it becomes a jangling ironmongery, and the point of it, the ballade, inaudible under the senseless beating of swords.

We went along with Leopold Stokowski, during the early thirties, when his first astonishing, colorful transcriptions of the *Toccatina and Fugue in D minor* and the *Passacaglia* by Bach, still con-

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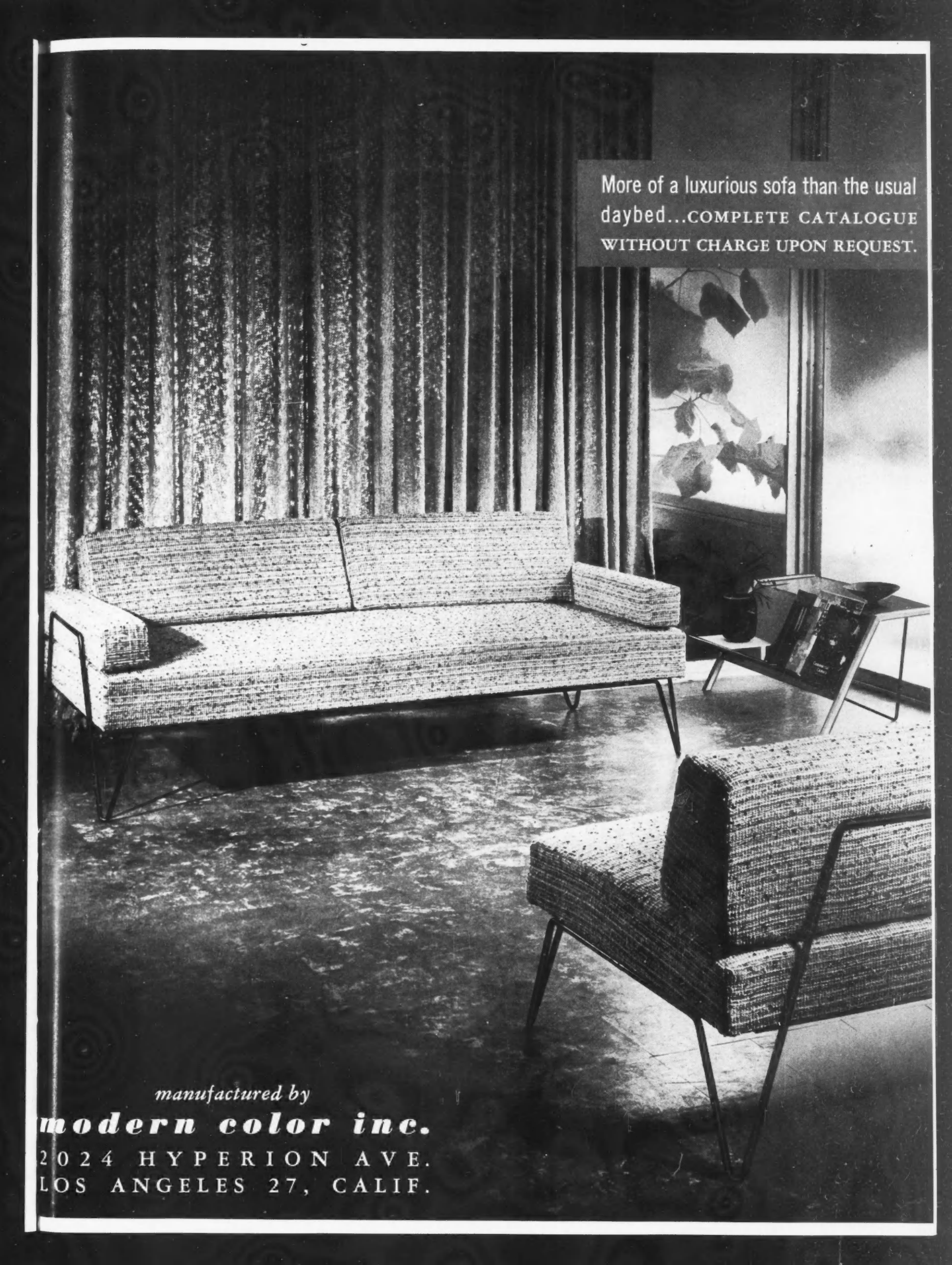
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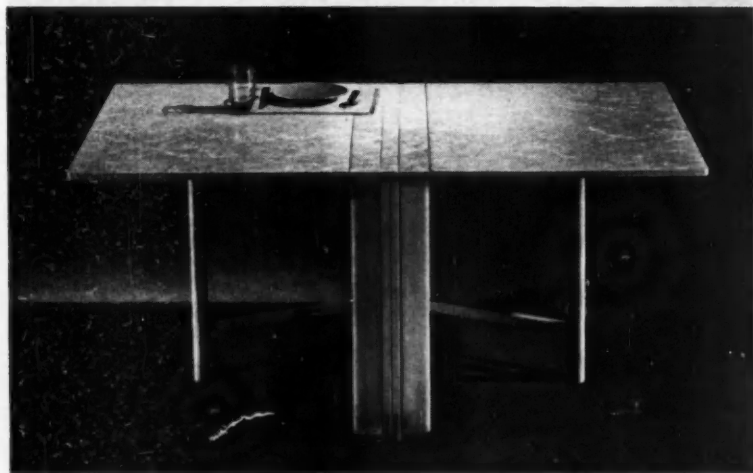
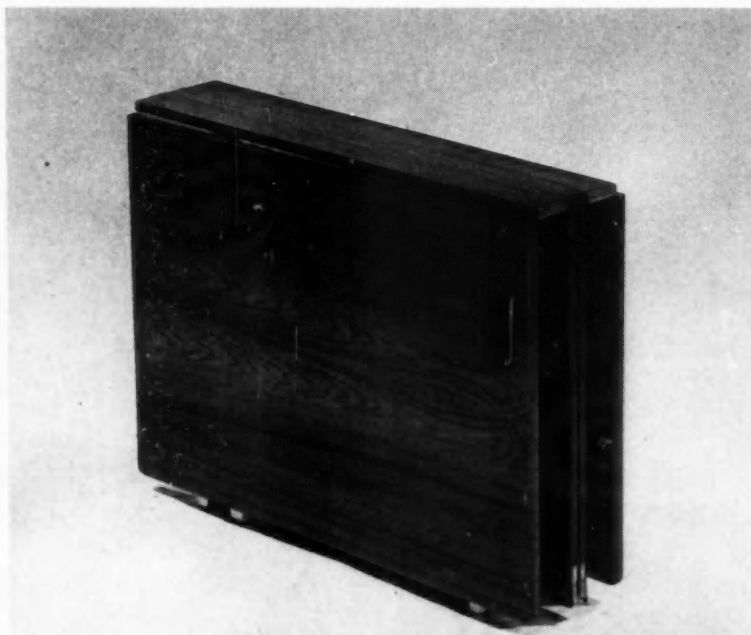
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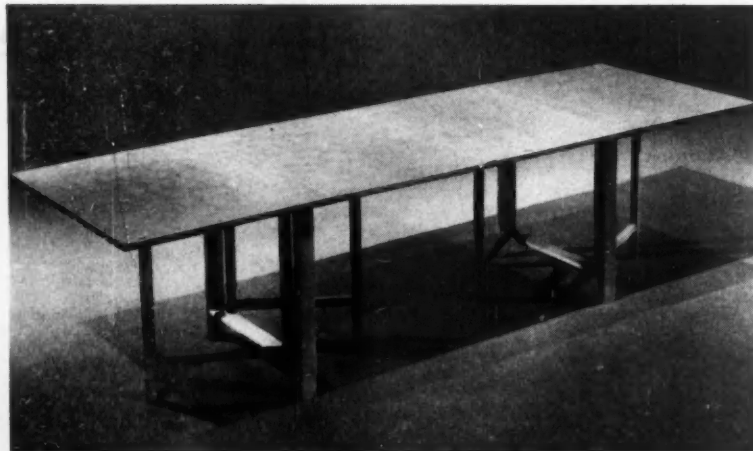


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servative and cleanly delineated, showed what had been missing from the organ-player's stubbornly conventional black and white.

Afterwards Stokowski and a host of others began mass-producing Bach transcriptions, even Palestrina transcriptions. Good conductors and bad conductors and arrangers of an otherwise appalling insignificance tried to outdo one another with volume and vibrato, blur and brass. The *Toccata and Fugue*, as if it were the only one, became *Fantasia*, the Disney picture; it skidded obliquely, disconcertingly up, down, across peaks and pinnacles of Bryce Canyon in an esthetic short by Werner Janssen—hilarious, a parody of the notion, but in Janssen's mind dead serious!

Theoretically, practically, I am in entire agreement with Vaughn-Williams, one of the master-composers of our time and a great adapter and maker of transcriptions. To hear him at work with an old melody or to hear Schoenberg's orchestral arrangement of the *St. Anne Fugue* is a privilege, a rare privilege, because these are demanding, they do not shriek in the crowd's ear. Sebastian Bach was his own first and best arranger. Neither for his own music nor for that of other men did he adhere to any rule of literalness. When he arranged the three-part mirror fugue of the *Art of Fugue* to be played on double keyboard, he added a fourth part. He translated violin concertos to clavier with such efficiency it has taken the best efforts of Joseph Szigeti and Ingolf Dahl to recover what they believe to be the original version of the *D minor Concerto*.

Nor does it matter whether the transcription results from long experiment and deep conviction or whether it is an occasional or commercial product. Bach's clavier concertos and the *Concerto for flute, violin, and clavier* probably were put together for the concerts presided over by the local lion of Leipzig musical society, Telemann. These were old scores reworked; Bach did not think enough of the social occasion to write new music for it. The reworking becomes a minute critical commentary on the original compositions.

So here it is that I disagree for the first time with Vaughn-Williams. I believe that the purpose of transcription is to make either better music or at least music equally as good as the original for a different and possibly less adequate instrument or instrumental combination. Mozart's transcriptions of Bach study the original as closely as Bach's transcriptions study the Italian masters of the concerto grosso; they are works of art, for which in turn Mozart composed aragio introductions in the new string medium, evolving his own very distinct style of expressive counterpoint; Mozart's later contrapuntal music is their progeny. Beethoven studied Mozart's *Quintet for piano and winds* by writing a very close creative imitation. The modern French habit of orchestrating piano pieces or turning out musical jewelry in versions for different instruments may have a commercial basis, but Ravel's orchestration of Mussorgsky's *Pictures at an Exhibition* is a display piece of which any composer could be proud. Yet Mussorgsky's original for piano solo has more substance than Ravel's flamboyant version.

The habit of thinking musical structure in terms of the piano with its manual limitations and afterwards translating it by the application of colorful orchestration can be treacherous. A piano original seems dangerously near to breaking through the orchestration of Stravinsky's two more recent symphonies. *Petrushka*, conceived at first for piano and orchestra, was later made a brilliantly effective display sonata. I would not give up the exquisite simplicity of Ravel's *Ma Mere l'Oye*, in the four-hand original written for two little girls, though I admire the fine wash-painting of his orchestration. Nor do I enjoy less Schoenberg's symphonic arrangement of the *G minor Piano Quartet* by Brahms for all my pleasure in the original. With such choices, you can both take it and leave it.

My second disagreement with Vaughn-Williams is the more serious. This has to do with what I call, because of its twisted thinking, *Antiantiquarianism*.

The chief argument of the antiantiquarian is to the effect that no elaboration of effort to revive the older styles of playing older music can be other than peculiar and pretentious: we can never make it sound as Bach did. This argument is followed by a recital of Bach's inadequate musical forces and the assertion that, although Bach may have realized his *Matthew Passion* with a minimum of sixteen poor voices, he would be much happier to hear it thundered out nowadays with three hundred. I have no doubt that

Bach would be pleased as Punch to hear a thoroughly good orchestral performance of a thoroughly adequate transcription of one of his display pieces for organ. But I can offer the expert testimony of a great Bach choral conductor, the late John Smallman, who insisted that a chorus of not more than thirty well-trained voices can sing both more clearly and more loudly, in the sense that every part is equally and individually projected in line instead of bulk to the farthest dimensions of a concert hall, than any chorus several times that size.

It depends on the music, you may add, and that is the point. You cannot play better jazz with an orchestra than with seven solo instruments. If the music needs bulk, you must give it bulk. No amount of bulk will make Beethoven's *Ninth Symphony* a satisfying experience in Hollywood Bowl; the music must have concert hall resonance. Mahler's *Eighth Symphony* sounds better in such vast space than ever in a concert hall; Schoenberg's *Gurrelieder* should go there very well, or Stravinsky's *Symphony of Psalms* or *Oedipus Rex*. The last time I made that suggestion the then unresigned Dr. Wecker denounced me far an amateur on the radio. Chamber music is best heard in a small auditorium. Mozart operas are not well adapted to the Metropolitan or the Shrine stages; such space is no less than enough for Boris Goudonoff.

Or to meet the other half of the antiantiquarian argument: no player who goes to the trouble of learning how to play the older music as it was played expects to play like Bach. He might as well try to play the Rubinstein *D minor Concerto* like Josef Hoffman. He tries instead to rediscover the manner in which Bach's music was played. He is aware of distinctions that trouble the ordinary performer not at all. In trying to realize these distinctions by using them instead of pretending that they do not exist he makes available to himself, and to others, if they will pay attention to what he is doing, a manner of melody, rhythm, harmony, and instrumental sound quite unlike our own. Objecting to such effort seems to me as futile as objecting to the use of an ur-text. The really absurd thing is to play self-consciously from a Bach ur-text, because one is too superior to play from a Busoni or a Liszt transcription, while producing results which are usually identical with, if inferior to, those of Liszt or Busoni.

The fact that a performer chooses to display himself on a harpsichord instead of a piano makes no essential difference, if he lets his instrument do the work of a piano; or a concert violinist, playing a Bach solo suite, if he aims at the breadth and volume of a string orchestra transcription.

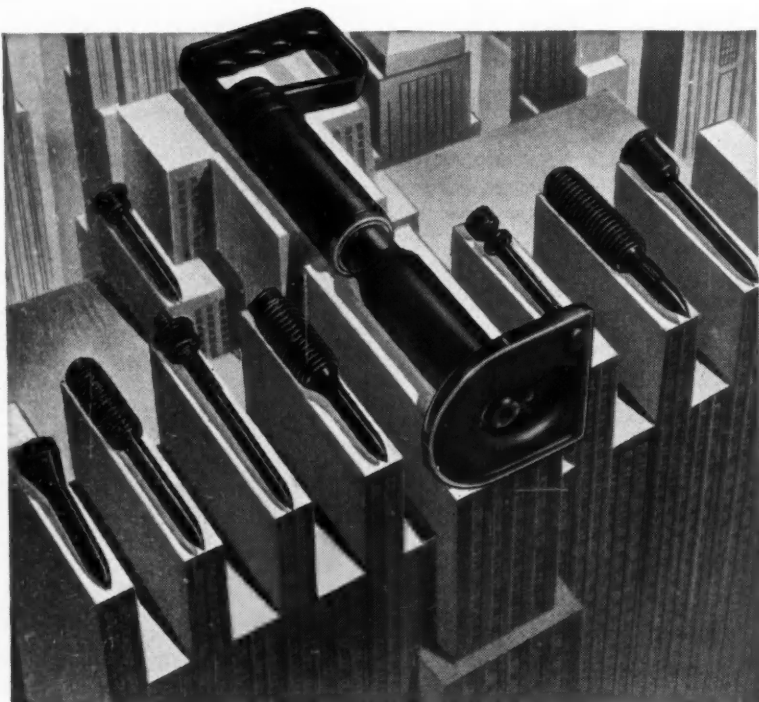
Why should composers, virtuosos, musicologists, and even mere modest musicians rage or primp their lips in disdain because some interested enthusiasts are finding out how Bach's music was played and was intended to sound. One would expect them to rejoice, as when the sacred brown veneer of dirt and mishandling, the revered grime, was at last wiped from the gorgeously colored Flemish and Italian paintings of the Renaissance. There are always experts and even artists who will defend the sanctity of grime. The freshening and quickening of classic art has been invariably opposed by specialists whose expertise consists in keeping their subject mysterious and remote. We have less use for orchestral transcriptions when we have heard the Busch chamber players; we care less for the Busch players when we have heard the proper balancing of string instruments with harpsichord. And so year by year we come nearer the splendors and silences of Couperin and Bach. Why should we stop short, peering through the grime, the noise which the uncomprehending performer substitutes for knowledge and art; why should not we ourselves possess the knowledge and the art?

Today we are only at the beginning of an eventual rediscovery of the natural idiom of sixteenth, seventeenth, and eighteenth century music. To carry through this rediscovery we need to build the proper instruments with which to play the music; we must learn to play these instruments in the style natural to them. The keys of a harpsichord, a clavichord, or an eighteenth century piano do not require the deep depression of a modern piano. The correct light, shallow action of these older instruments is necessary, if we are to play with the rhythmic flexibility and nuance appropriate to the music of this period. The four-finger technique commonly used for these instruments needs to be revived, as anyone can find out for himself by trying it. I was pleased to learn recently that the great French pedagogue Isidor Philipp teaches this sort of fingering for the playing of the older keyboard music. The return



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Sol Babitz has demonstrated to my entire satisfaction that it is not enough to have a violin and bow built according to eighteenth century design, if one does not learn to hold them in the manner of the period. The violin is supported on the chest, the bow held high on the stick between thumb and index finger. Such a technic, though it will produce less volume, imparts to the playing of Bach solo sonatas an ease, a delicacy, a freedom and rhythmic control unobtainable in any other manner or with any substitute instrument. The unnecessary technical problems which result from trying to perform these sonatas in the wrong manner on the wrong instrument are done away with. And since this music was not intended to be played loudly, we should accustom ourselves to hearing it played not loud.

As to the revival of correct idiomatic style: we need not stop with Couperin and Bach. Lhevinne, Rachmaninoff, and Hoffman gone, who, except Guiomar Novaes, retains any correct notion of idiomatic style in the playing of Chopin? I have written at length about the significance of rhythmic alteration, the natural manner of playing melodies in the earlier music. This is indicated by the notation, according to precise fundamental rules which may be learned, and produces a correctly rhythmized, clearly delineated counterpoint when the melodies are combined. Is it antiquarianism to rescue music from the fallacies of complacent ignorance? The only bad thing about sin is that people go on sinning.

Other cultures have no such prejudice. Japanese, Chinese, and Hindu musicians, more sophisticated than our own, carry to an extreme the reproduction of styles more ancient than ours. The Roman Catholic church, through *Motu proprio*, has insisted upon the perpetuation of styles suitable to sacred use; the result of this insistence has been not only a marvelous reviving of ancient sacred choral music but the creation of new music, for example the *Sixth*

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It is not at all improbable that a renewed understanding of the notation regularized by Couperin and Sebastian Bach, with its exact but not prescriptive ways of indicating rhythm, tempo, and embellishment, will figure largely in the creation of music written fifty or a hundred years hence. It is very likely that a general rediscovery and use of the Pythagorean, Just Intonation, Meantone, and Well-tempered systems of tuning will almost completely break down our present slavish adherence to the single harmonic coloring of equal temperament.

The intelligent listener may become aware that no amount of listening to music can approximate the fascination of playing music for oneself, reading music as one reads a book or in company as one sings or plays a game. Revival of the recorder has thrown open a nearly lost literature of wind music for the pleasure of wilful amateurs who do not fear their own mistakes. One can predict that the general distribution of newly built harpsichords, clavichords, spinets, and other older instruments, especially the unmodernized forms with their more delicate, subtle, and less intrusive sound will begin a displacement of the domestic piano. Or like my amateur friends of the Firehouse Five one can resume the art of jazz improvisation.

A little spinet in a corner of the room will bring to the amateur player use of a literature larger than the present-day concert repertoire, fresh, intended not for performance but for reading in domestic quiet, that at which culminated in Bach's household music, the 550 sonatas by Domenico Scarlatti, an inexhaustible supply, a variety of musical experience quite unknown to the professional pianist who dashes off a trio of little pieces or a small suite to start a program, the wealth of Handel, Blow, Purcell, Buxtehude, Weckman, Rameau, Couperin, d'Anglebert, Pasquini, Froberger, Frescobaldi, Sweelinck, Cabezón, and the Elizabethan English.

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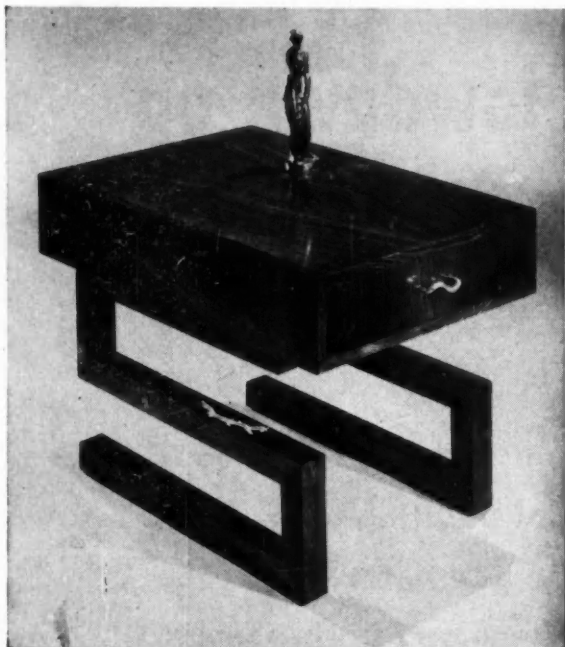
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in consort—a wind instrument or a guitar will do as well, you can make do with a ukelele. Really, why should I urge you! These cheerful things will come to pass, in spite of prejudice, if we will all become amateur musicians. It will give us a very fresh approach to contemporary music as well: the extremest of the extreme will sound less strange. The enthusiasm of an amateur musician is much livelier than the gloom of a literary musicologist. The best informed listener is often the most unprepared, the most unable, the most unwilling to do justice to an unexpected work of art. You see, being an amateur who reads music aloud sets you free from anti-quarianism.

CURRENTLY AVAILABLE PRODUCT LITERATURE AND INFORMATION

Editor's Note: This is a classified review of currently available manufacturers' literature and product information. To obtain a copy of any piece of literature or information regarding any product, list the number which precedes it on the coupon which appears below, giving your name, address, and occupation. Return the coupon to Arts & Architecture and your requests will be filled as rapidly as possible. Items preceded by a dot (•) indicate products which have been merit specified in the Case Study House Program.

ACCESSORIES

(140a) CONTEMPORARY ACCESSORIES & OCCASIONAL PIECES BY HOSKEN.—Information and catalog available of many new items: stacking stools, coffee tables shown in "Good Design"—Chicago, Serving trays, serving cart, occasional tables, hanging shelves, and many other pieces. Also a line of unusual spring wire jewelry. All designed by James and Franziska Hosken.—Write to Hosken, Inc., 10 Roanoke Avenue, Boston 30, Massachusetts.

—Howard Miller Clock Company, Zeeland, Mich.

• (956) Indoor Incinerator: Information Incinerator unit for convenient disposal combustible refuse, wrappings, papers, garbage, trash; gas fired, unit is 35" high, 22" in diameter, weighs 130 pounds, has capacity of two bushels; heavy steel plate combustion chamber; AGC approved; excellent product, merit specified CSHouse 1950.—Incinerator Division, Bowser, Inc., Cairo, Ill.

APPLIANCES

• (426) Clocks: Information contemporary clocks by leading designers, including George Nelson; probably best solution to contemporary clock design.

• (365) Kitchen Appliances: Brochures, folders complete line Sunbeam Mixmasters, Wafflemasters, Ironmasters, Toasters, Shavemasters; recent changes in design well illustrated.—Sunbeam Corporation, Roosevelt Road and Central Avenue. Chicago 50, Ill.

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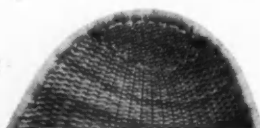
\$55. for dining size
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ARCHITECTURAL PORCELAIN ENAMEL

(929) Architectural Porcelain Veneer: Brochure, well illustrated, detailed, on architectural porcelain veneer; glass-hard surface impervious to weather; permanent, color fast, easy to handle. install; lends well to all design shapes; inexpensive; probably best source of information on new, sound product.—Architectural Division, Porcelain Enamel Publicity Bureau, P. O. Box 186 East Pasadena Station, Pasadena 8, Calif.

CABINETS

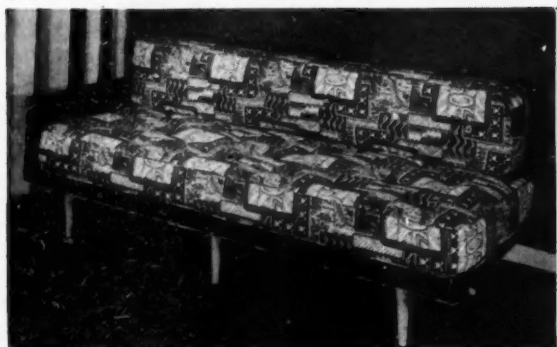
(124a) All-Steel Kitchens: Complete information, specification details, planning data Shirley all-steel kitchens; quality units, good contemporary design, excellent engineering; produced in standard series of individual matched units; sinks formed from deep-drawing 14-gauge porcelain-on-enamel to which acid-resistant glass-porcelain is permanently bonded; cabinets cold-rolled furniture steel, solidly spot-welded; finish inside and out baked-on synthetic enamel; flush door, drawer fronts, semi-concealed hinges; rubber bumpers on doors, drawers; exceptionally quiet operation; includes crumb-cup strainer or Consume-away food disposer unit; this equipment definitely worth close study, consideration; merit specified CSHouse 1952.—Shirley Corporation, Indianapolis 2, Ind.

DECORATIVE ACCESSORIES

(122a) Contemporary Ceramics: Information, prices, catalog contemporary ceramics by Tony Hill; includes full range table pieces, vases, ash trays, lamps, specialties; colorful, well fired, original; among best glazes in industry; merit specified several times CSHouse Program magazine Arts & Architecture; data belongs in all contemporary files.—Tony Hill, 3121 West Jefferson Boulevard, Los Angeles, Calif.

(128a) Formica Fabricated Vanitory: Comprehensive information, including full color illustrations, remarkably well designed Globe Formica-fabricated Vanitory for use in bathrooms, dressing rooms; available in wide range of colors, surface patterns, styles; compact flush lavatory set in horizontal surface of Formica; models provide towel storage, cabinet space, drawer space; 23 3/4" deep by 28" to 44" wide; particularly adaptable for use in contemporary houses or where color and permanent surface is requirement; practical, sensible, deserves closest consideration; data belongs in all files; merit specified for CSHouse 1952.—Thomas W. Berger, Inc., Cincinnati 2, Ohio.

(101a) Transparent Mirror: Full information on Mirropane; looks like mirror when room is brighter than space behind glass, is transparent when there is light behind; coated metallically, not mechanically durable; particularly adaptable for commercial decoration,



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effective in sales rooms, exhibits to display merchandise.—Liberty Mirror Division, Libbey-Owens-Ford Glass Company, 9895 Nicholas Building, Toledo 3, Ohio.

ELECTRICAL EQUIPMENT

(130a) Delayed Action Light Switches: Folder, complete illustrated information Edco delayed action light switches: provides full light for exit after switch has been turned off; shuts off automatically almost minute after switch is flipped; particularly adaptable for front porches, back porches, bedrooms, hallways, garages, basements, bathrooms stairways; industrial uses include protection of watchmen, precaution against accidents; install like any other switches; action controlled by spring loaded neoprene diaphragm operating in sealed chamber; practical product well worth investigation; merit specified CSHouse 1952.—Electric Deodorizer Corporation, 9993 Broadstreet, Detroit 4, Mich.

• (152) Door Chimes: Color folder Nu-Tone door chimes; wide range styles, including clock chimes.—NuTone, Inc., Madison and Red Bank Roads, Cincinnati 27, Ohio.

(129a) Surface Wiring System: Comprehensive information, technical data, illustrations, installation and use suggestions Wiremold Plugmold surface wiring systems; permit convenience outlets closely spaced wherever desired; available wired, unwired; can be used at baseboard, chair rail heights; particularly adaptable in kitchen above workspace, or in workshops; line includes practical accessories; well engineered, definitely worth consideration;

merit specified for CSHouse 1952.—The Wiremold Company, Hartford 10, Conn.

FABRICS

(97a) California Fabrics: Information line of California fabrics selected for 1950 "Good Design" exhibition Chicago Merchandise Mart, Detroit Institute of Art's show "For Modern Living", A. I. D. exhibits sponsored by Los Angeles County Museum and Taft Museum, etc., "Design for Use, U.S.A." now being assembled by Museum of Modern Art for exhibit principal cities in Europe and Great Britain, merit specified for CSHouse 1950; information available to architects, designers, interior decorators.—McKay, Davis & McLane, 210 East Olympic Boulevard, Los Angeles, Calif.

(955) Contemporary Fabrics: Information one of best lines contemporary fabrics, including hand prints and correlated solids for immediate delivery; Textura by Testa, consisting of small scale patterns creating textures rather than designs; reasonably priced; definitely deserves close appraisal.—Angelo Testa & Company, 49 East Ontario Street, Chicago 11, Ill.

(988) Silks: Information Scalamandre silk fabrics; wide range patterns, designs, colors; one of best sources of information.—Scalamandre Silks, Inc., 598 Madison Avenue, New York, N. Y.

FLOOR COVERINGS

(89a) Carpet Strip, Tackless: Full color brochure detailing Smoothedge tackless carpet strip: Works on curtain stretcher principle; eliminates tack in-

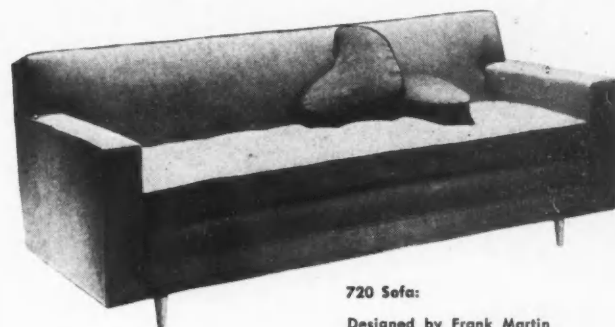


341 Sectional:

Contemporary sectional pieces designed by Greta Magnusson Grossman. All foam rubber construction over springs. Legs available in birch or ash. In muslin, \$213.00 each.

333 Chair:

Also by Greta Magnusson Grossman. Foam rubber over springs with matt gray finish metal legs of spring steel. Price, \$130.00 each in muslin.



720 Sofa:

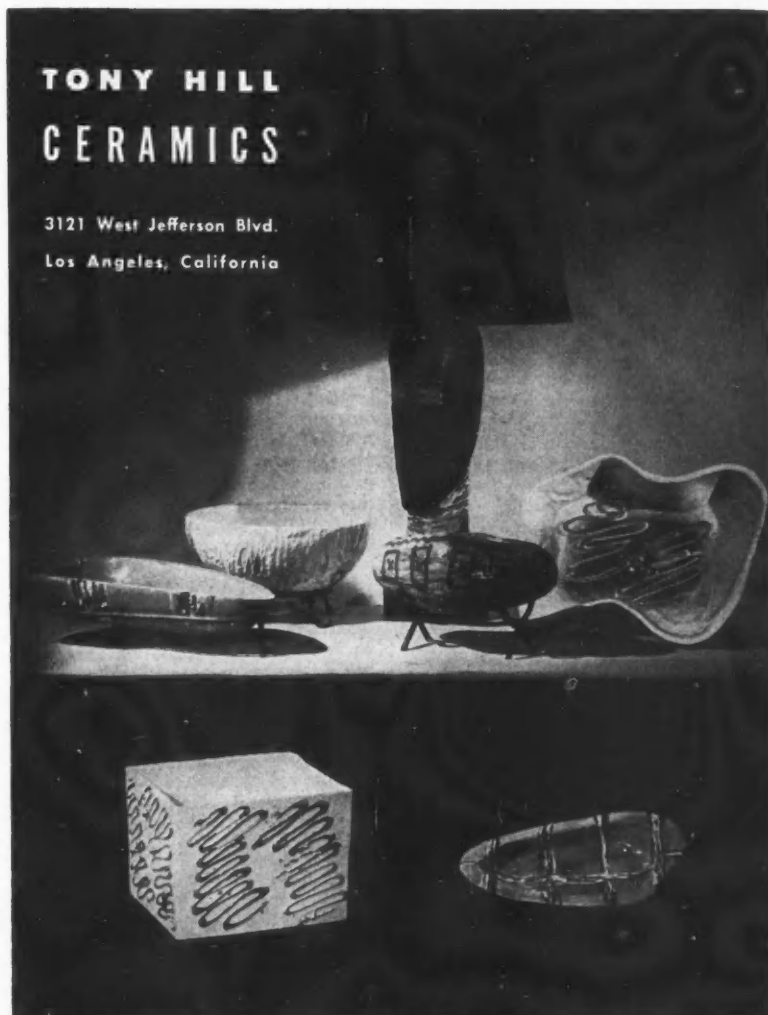
Designed by Frank Martin of Modern-Line, Inc. Single reversible foam rubber cushion with buttons. Luxury comfort combined with modern tailored look. In muslin, \$284.00 each.

Merchandise illustrated above together with additional styles available at the stores listed below:

Barker Bros., Downtown, Los Angeles, California
Burdines, Miami, Florida
Frank Bros., Long Beach, California
Frank Newman Co., San Francisco, California
V. J. Lloyd, Inc., San Diego, California
McCart & Bultman, Bakersfield, California
Modernage, New York, New York
Suniland Furniture Co., Houston, Texas
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MODERN LINE Inc.

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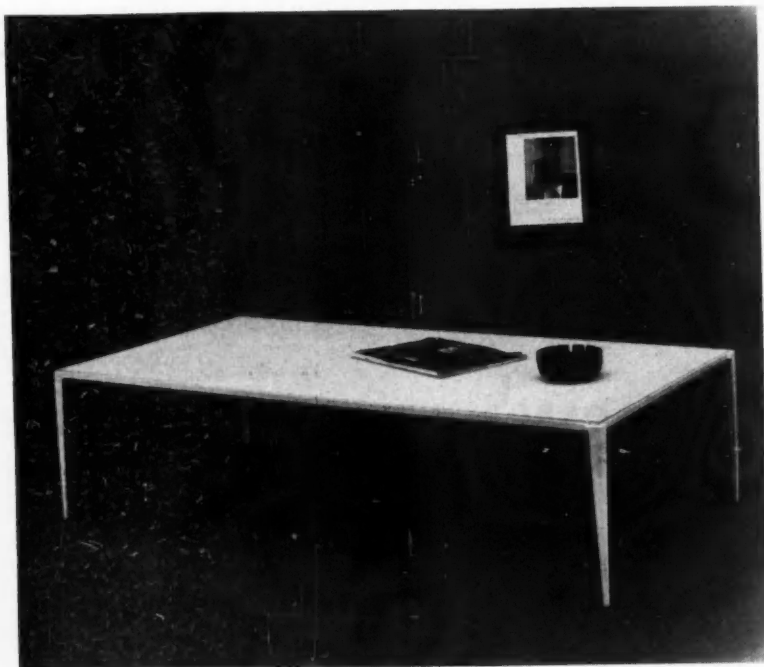


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x $\frac{1}{2}$ " angle iron; channel $\frac{1}{8}$ x1"; top $\frac{3}{8}$ "
Douglas fir plywood; finish two coats of
white enamel; overall 12" high, 24" wide,
48" long; all visible welds ground smooth;
light, strong, simple; orders promptly han-
dled—no delays.

WILLIAM ALVAREZ

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dentations, uneven installations.—The Roberts Company, 1536 North Indiana Street, Los Angeles 63, Calif.

(989) Custom Rugs: Illustrated brochure custom-made one-of-a-kind rugs and carpets; hand-made to special order to match wallpaper, draperies, upholstery, accessories; seamless carpets in any width, length, texture, pattern, color; inexpensive, fast service; good service, well worth investigation.—Rugcrafters, Inc., 143 Madison Avenue, New York 16, N. Y.

• (309) Rugs: Catalog, brochures probably best known line contemporary rugs, carpets; wide range colors, fabrics, patterns; features plain colors.—Klearflax Linen Looms, Inc., Sixty-third St. at Grand Ave., Duluth, Minn.

FURNITURE

(108a) Contemporary American Furniture: Full information new line of contemporary American furniture, including more than 100 original chairs, easy chairs, club chairs, sofas, seating units, occasional tables, functional and sectional furniture, designed by Erno F. Fabry; fine woods expertly crafted; available in high gloss, satin sheen, luster finish; reasonably priced; this line deserves attention.—Fabry Associates, Inc., 6 East Fifty-third Street, New York, N. Y.

(85a) Contemporary Furniture, Daybed: Information new retail outlet good lines contemporary furniture, accessories; includes exceptionally well designed Felmore day bed; seat pulls forward providing generous size single bed; $4\frac{1}{2}$ " thick foam rubber seat, fully upholstered reversible seat cushion, permanent deep coil spring back; frame available in walnut, oak, ash, black; legs aluminum or black steel; reasonably priced, shipped anywhere in country; this is remarkably good piece, deserves close attention.—Felmore Associates, 15221 Sunset Boulevard, Pacific Palisades, Los Angeles, Calif.

(141a) Contemporary Upholstered Pieces: Information, illustrative data new Palisades Group contemporary upholstered pieces designed by Greta Magnusson Grossman for living rooms, dens; includes sectionals, chairs, sofas; foam rubber construction; also information factory designs including apartment and full scale pieces in foam rubber construction; clean, articulate lines; reasonably priced; well worth appraisal, consideration.—Modern-Line, Inc., Post Office Box 71, Gardena, Calif.

• (316) Furniture: Information top lines contemporary furniture designed by Eames, Naguchi, Nelson.—D. J. DePree, Herman Miller Furniture Company, Zeeland, Mich.

• (314) Furniture, Retail: Information top retail source best lines contemporary lamps, accessories, fabrics; designs by Eames, Aalto, Rhode, Naguchi, Nelson; complete decorative service.—Frank Brothers, 2409 American Avenue, Long Beach, Calif.

(6a) Modern Office Furniture: Information one of West's most complete lines office, reception room furniture;

modern desks, chairs, tables, divans, matching accessories in woods, metals; wide range competitive prices on commercial, custom pieces; professional, trade discounts.—United Desk Company, Twelfth and Olive Streets, Los Angeles, Calif.

(15a) Swedish Modern: Information clean, well designed line of Swedish modern furniture; one of best sources.—Swedish Modern, Inc., 675 Fifth Avenue, New York 22, N. Y.

(136a) Wormley Pieces: Catalog new Dunbar Americana pieces designed by Edward J. Wormley; good contemporary for living, dining rooms; predominating material is walnut; others include birch, cherry, hickory; novel functional features include hot plate built into lazy Susan dining table, dining chairs that revolve, engineered cabinet interiors, electric stoves in storage units; well worth inspection.—Dunbar Furniture Corporation of Indiana, Berne, Indiana.

GLASS

(126a) Figured Glass: Comprehensive well prepared 20-page two-color illustrated brochure featuring Figured Glass by Mississippi; glass combines interesting texture with contemporary practicality to produce interiors, exteriors that capitalize on available light without sacrificing privacy; available in wide variety of patterns, surface finishes including structural corrugated, Structuralite, Aurora, Bandlite, Bevelite, Broadlite, Dewlite, Factrolite, Florentine, Syenite hammered, Hylite, Luxlite, Magnalite, Pentecor, Pluralite, ribbed, smooththrough, Misco polished wire glass, Coolite heat absorbing and glare reducing glass; undoubtedly best source of information on this subject; merit specified CSHouse 1952.—Mississippi Glass Company, 88 Angelica Street, St. Louis 7, Mo.

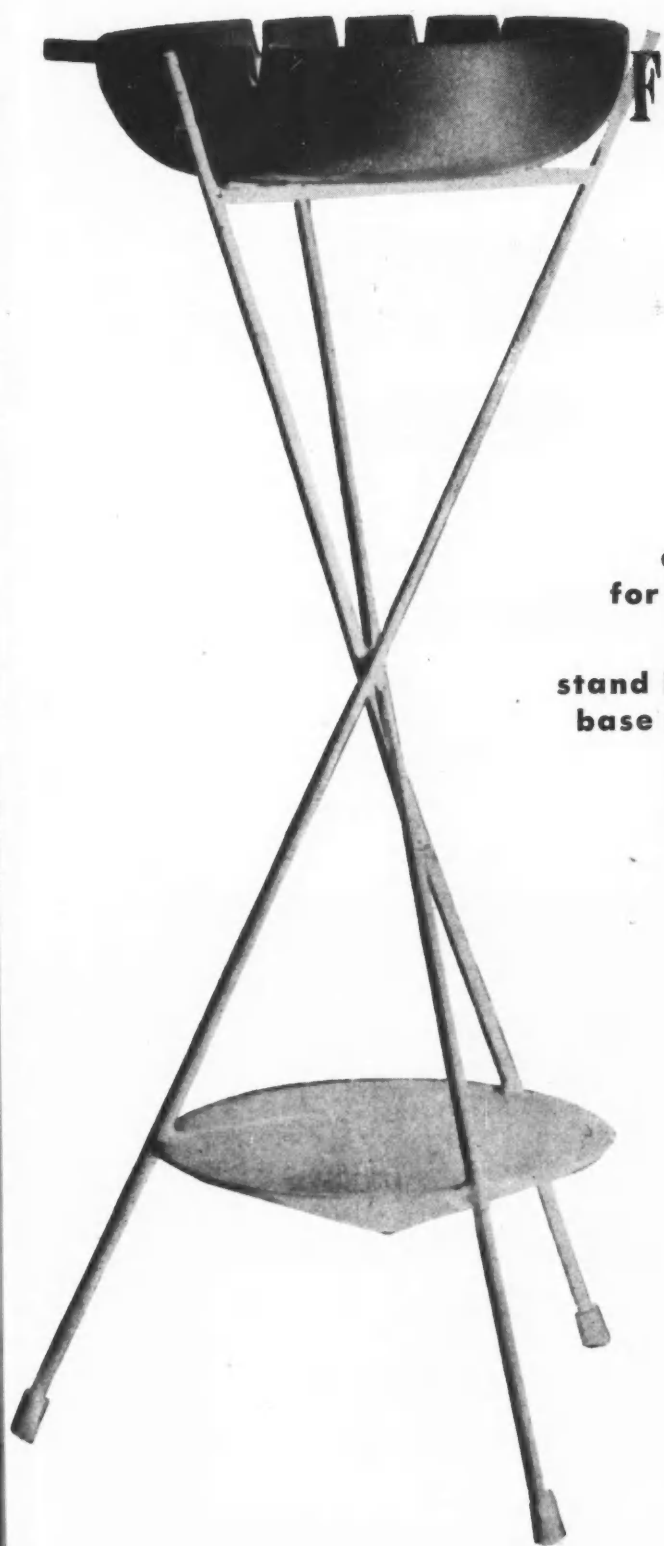
HEATING & AIR CONDITIONING

• (798) Boilers, Burners: Brochure, information six sizes vertical tube-type boilers, compact interchangeable oil, gas burners; full specifications; detailed, well illustrated descriptions.—The Aldrich Company, 125 Williams Street, Wyoming, Ill.

(994) Heating Facts: Remarkably well prepared 20-page question-and-answer brochure "How to Select Your Heating System" featuring Lennox heating equipment, now available; practical, readable information by world's largest manufacturers; should be in all files.—Dept. AA-5, The Lennox Furnace Company, 974 South Fair Oaks Avenue, Pasadena.

• (827) Kitchen Ventilating Fans: Well illustrated 4-page folder featuring new NuTone kitchen ventilating fans; wall, ceiling types; more CFM than competitive models in same price range; only screw driver needed to install; quickly removable grille, lever switch, motor assembly rubber mounted; well designed, engineered; merit specified for CSHouse 1950.—NuTone, Inc., Madison and Red Bank Roads, Cincinnati 27, Ohio.

(111a) Packaged Attic Fan: Literature giving full data simplified packaged attic fan; vertical discharge unit, built-in suction box 3' square projects only 17 $\frac{1}{2}$ " above attic floor; good for use over
continued on page 38



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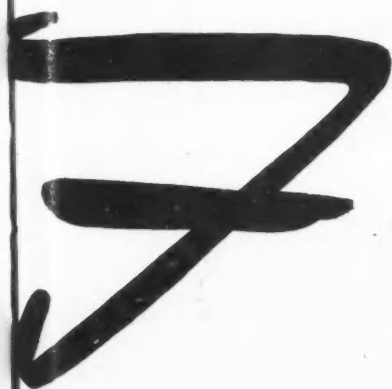
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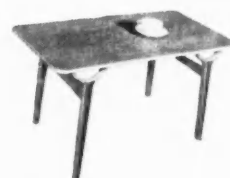
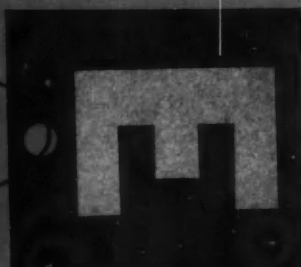
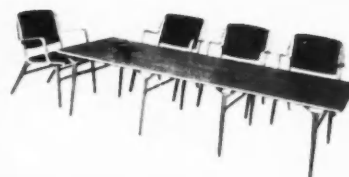
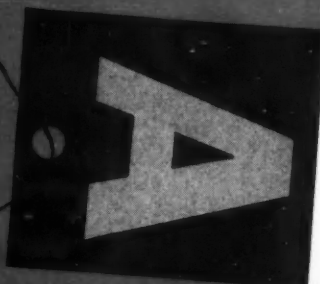
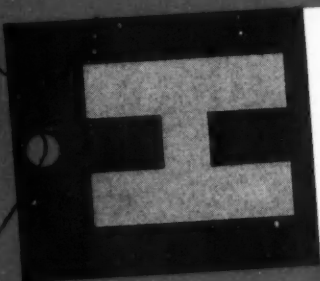
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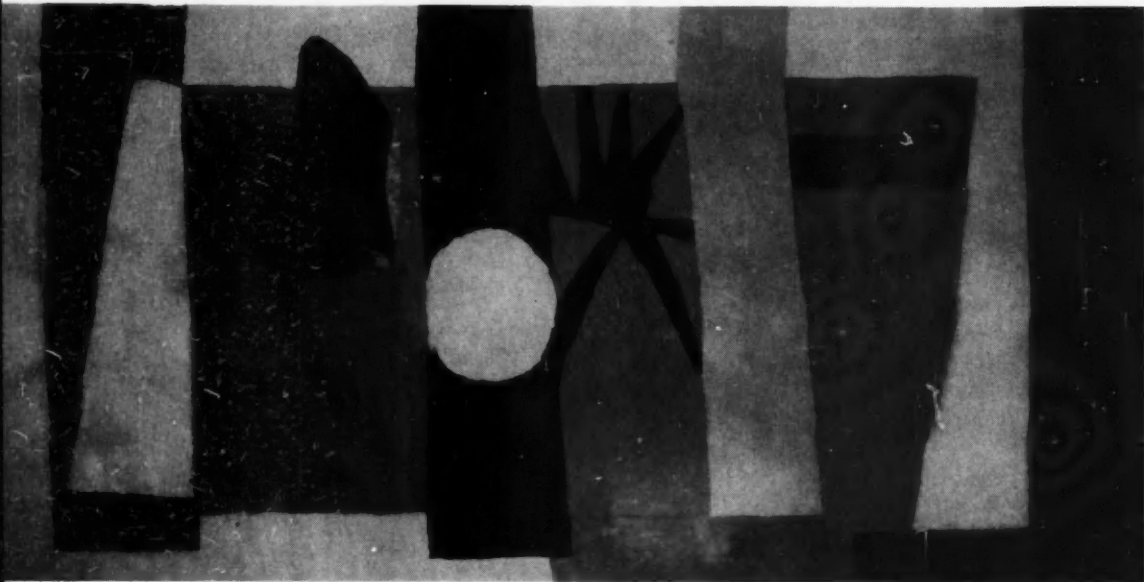
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The main lines of the United Nations Educational, Scientific and Cultural Organization's cultural activities have already been laid down in past years: the furthering of world intellectual cooperation, the preservation of man's cultural heritage and the assurance of protection to writers and artists. But for 1952 the General Conference has given them more precision. In the same way as it works in cooperation with artists and writers, UNESCO will also work for and with men of science and increase its efforts on behalf of international institutes of scientific research giving special emphasis to projects that will contribute directly to the improvement of the living conditions of mankind by way of solutions to modern economic and social problems.

UNESCO's efforts are resolutely aimed toward action in the cause of peace, and here special emphasis will be placed on extension of the social sciences. It holds generally that all of its actions must go beyond any political implications, that an objective analysis of facts carried out in an impartial spirit is necessary to the enlightenment of governments and public opinion if the contributing causes of war are to be tracked down and eliminated. The cooperation of scientists of all nations and the pooling of all discoveries is a basic requirement to progress. Briefly, ten major points were restated or developed at the last General Conference of UNESCO which defined its program in 1952.

TEN MAJOR POINTS OF UNESCO'S 1952 PROGRAMME

1. A world-wide campaign against illiteracy and low-living standards. A network of international fundamental education centres to train specialized teachers and prepare reading and visual materials. First centre—at Patzcuaro, Mexico—opened in May 1951 to be enlarged to receive additional 100 students; second centre to be established in another part of the world.
2. A world campaign for free and compulsory primary education. Special 1952 target: South East Asia.
3. Campaign for extended workers' education. 1952 target: more trained leaders in this field. UNESCO will set up International Adult Education Centre specially geared to workers' education.
4. Strengthening of international scientific research institutes. Special 1952 targets: world campaign to fight increasing desert zones and soil erosion through the International Arid Zone Council; provide nations with facilities for using complicated, costly machines known as "electronic brains" and promote research in this field through the establishment of International Computation Centre.
5. Broad investigation into social repercussions of technical development and adaptation needed by peoples so that technology will not destroy the cultural heritage. 1952 target areas: Africa, South East Asia.
6. Social, economic investigations, public opinion surveys to study ways of maintaining peace in the world's danger tension areas and help normalcy in regions following end of hostilities. Work to be carried out on request of ECOSOC.
7. Work will begin on a Scientific and Cultural History of Mankind bearing witness to fundamental unity of men everywhere in conquest of knowledge and in the arts. International Commission of 51 members from 25 countries will collaborate.
8. After three years' preparatory work, a Universal Copyright Convention will be drawn up in 1952, marking one of the most valuable achievements of UNESCO.
9. World campaign to seek methods of reducing paper pulp shortage.
10. Intensified aid to Arab refugee children. Already over 95,000 children benefitting from UNESCO campaign in 114 desert schools and private and public institutions.



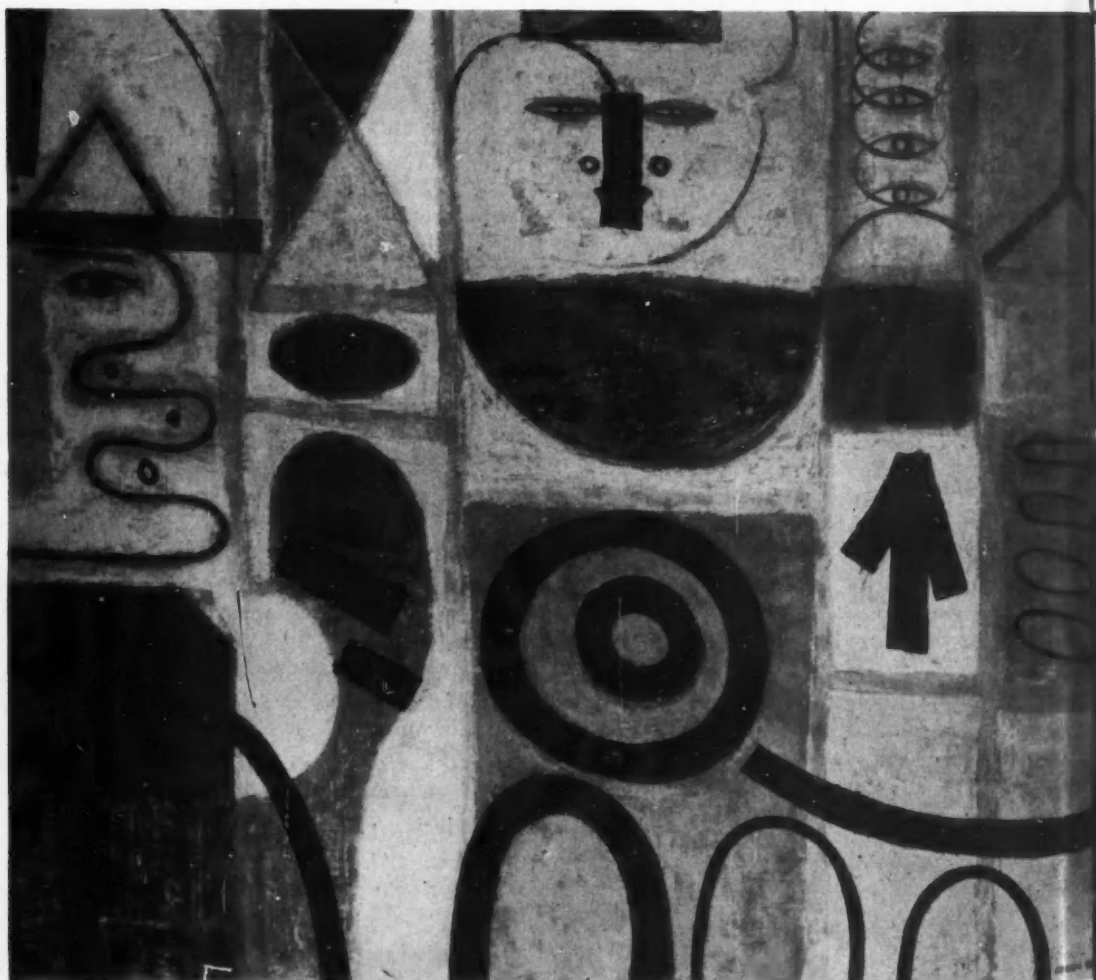
ROBERT MOTHERWELL

ROBERT MOTHERWELL: THE RISE AND CONTINUITY OF ABSTRACT ART—From a lecture given at the Fogg Museum, Harvard University.

I have placed emphasis on the modern artist's existence as a solitary individual. I would be misleading however if I left the impression that this solitariness is caused solely by his desire, whether conscious or unconscious, to remain aloof from the world surrounding him, as when the Chinese artist argued that the best place for a studio is on a mountain top, that is, that withdrawal from the world is a necessary condition of contemplation. Only psychological analysis of each modern artist as an individual could adequately demonstrate how far his solitude is brought about by his own character in the sense that, whenever we encounter an aloof individual, artist or not, we suspect that his isolation derives in part, from his own secret desires.

Still, if we assume the hypothesis—a false one, I am sure, whose fruitfulness is not affected by its falseness—that every modern artist wants to come into intimate contact with the world—that is, with other human beings—as an artist, then it is immediately apparent that the general ignorance of plastic culture as a whole among other human beings—laymen of course, but most intellectuals too, often even critics and museum directors—is such that a modern artist often has difficulty in being granted some of the simplest things that he is, intelligent, accomplished, cultivated—since hardly anyone but his confreres can “read” his work and consequently his basic characteristics. Perhaps it is for this reason that in modern times artists have written and spoken in public so much, and issued manifestoes by the dozens.

It is true that modern art has a unique amount of experimentation in it, and that perhaps only people very close to these experiments can at once “read” them. But it is true too that much of the so-called “unintelligibility” of modern art is a result of the enormous extension in modern times of the background of art, a background which was for everyone until a century or so ago, and still is for most people the realism of Greece and Rome and the Renaissance, and modern modes of illustration. If I may give an example from my own experience, which I am certain is that of every advanced artist who



Adolph Gottlieb

Photographs Courtesy of
Kootz Gallery, New York



Adolph Gottlieb

earns his living by teaching, my students come to me—all themselves teachers of art, by the way—with their chief experience in painting from the model as it has been taught in academic institutions from the time of Delacroix and Ingres down to our own day in, say, the Art Students League of New York or the Chicago Art Institute. This narrow background—self-evidently narrow, when one compares it with the totality of world art, which is now available to everyone, less, as Andre Malraux points out, because of the ease and speed of modern travel than because of the enormous diffusion of reproductions—leads the students to believe at first sight that I propose to teach them radically experimental techniques (even the idea of experiment seems radical to them), "wild" and irrational beyond belief (one sees very well even now how inevitable it was that such terms as "fauve" and "dada" should come to be accepted, with malice by the public and humor by the artists), tolerated at first only by the authority of my position as the teacher of the class. One of my pleasures, and one of the students', is when the day comes, more rapidly than one expects in a studio class, less rapidly in a lecture course, that students can "read" a Mondrian or a Miro or a cubist collage as feelingly as they already could a Vermeer or a Chardin or a Goya; an equally great pleasure on my part, and one unexpected on the students' part, is that they can also "read" with equal ease an Italian primitive, a Cretan clay figure, a Byzantine mosaic, a New Hebrides mask. It is interesting that once this range of perception is added to (continued on page 41)

I have always worked on the assumption that if something is valid or meaningful to me, it will also be valid and meaningful to many others. Not to everyone, of course. On the basis of this assumption I do not think of an audience when I work, but only of my own reactions. By the same token I do not worry whether what I am doing is art or not. If what I paint is expressive, if it seems to communicate the feeling that is important to me, then I am not concerned if my work does not have known earmarks of art.

My work has been called abstract, surrealist, totemistic and primitive. To me these labels are not very accurate. Therefore, I chose my own label and called my paintings pictographs. However, I do not think labels are important.

After spending a year in Arizona around 1938, I came back to New York with a series of still lifes. Everyone said my paintings had become very abstract. The thought had never occurred to me whether they were abstract or not abstract. I simply felt that the themes I found in the Southwest required a different approach from that I had used before. I think the same is true of my pictographs. The material I use requires the style I have built around it. If I should find other subjects and forms that interest me more, I shall no doubt find it necessary to use a different method of expression.

People frequently ask why my canvases are compartmentalized. No one ever asks this about a house. A man with a large family would not choose to live in a one room house. It is understood that for convenience and privacy it

ADOLPH GOTTLIEB

is desirable to divide a house into compartments and it can at the same time be beautiful.

I am like a man with a large family and must have many rooms. The children of my imagination occupy the various compartments of my painting, each independent and occupying its own space. At the same time they have the proper atmosphere in which to function together, in harmony and as a unified group. One can say that my paintings are like a house, in which each occupant has a room of his own.

—ADOLPH GOTTLIEB.

Robert Motherwell



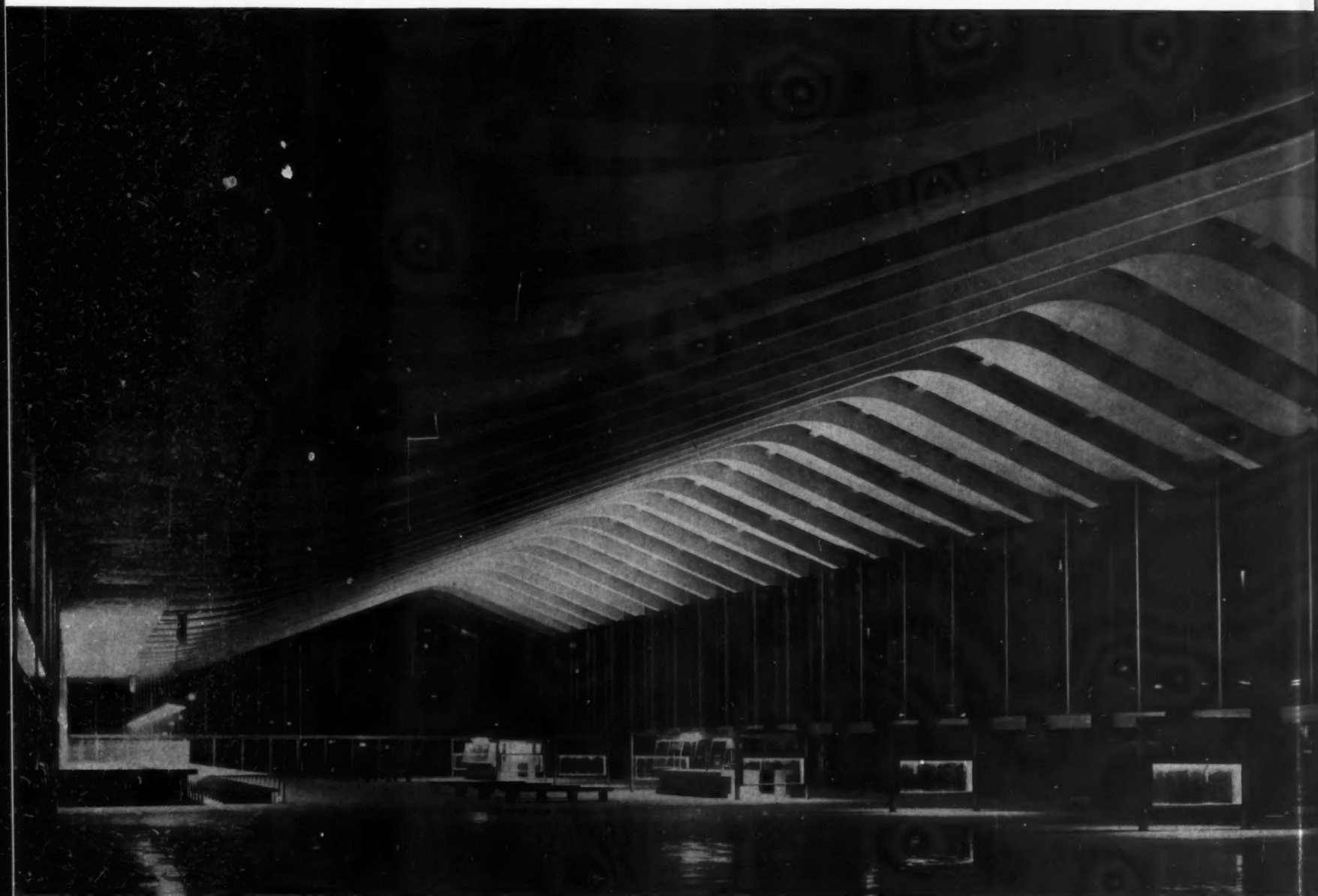


RUBEN FIENGA, *construction engineer*

THE NEW RAILROAD STATION: ROME

M. CASTELLIAZZI, V. FADIGATI
E. MONTUORI, A. VITELLOZZI
engineers

L. CALINI, A. PINTONELLO
architects



Opposite page, upper left: View of the waiting room ceiling showing the linear skylights along the beams. Below: Waiting room and ticket office with a floor of pink granite and seats of red granite. This page, below: Panoramic front view. Below right: Train concourse. Bottom left: Exterior view of the dining room.



At the time the original project for the Rome Terminal was conceived in 1938, Italy was at the height of its fascist power; an era sterile and grandiose in its art and architecture. Conceived during this time, the character of the station was to have been a modernized temple, heroic in scale with super colossal columns at the entrance.

Fortunately, only one part of the station went under construction at that time, this being the side street office building (illustrated on page 4 in contrast to the present construction of the main building) This section was finished during the early years of the war, the rest being halted because of the generally unsettled conditions.

In December, 1947, it was decided to discard the existing designs for the main part of the station and hold a competition for an entrance and office building that would "reflect the new way of life in Rome, the change of political ideologies; and although there existed the possible loss of the monumentality, it would gain by being more human and appropriate to the democratic way of life." The



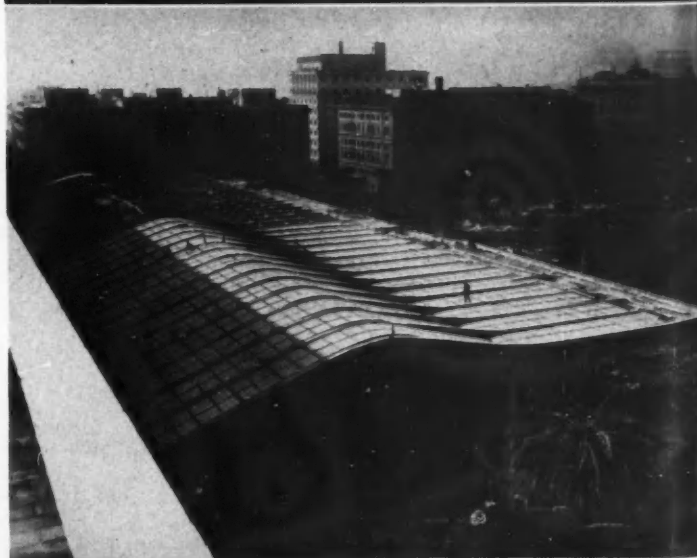
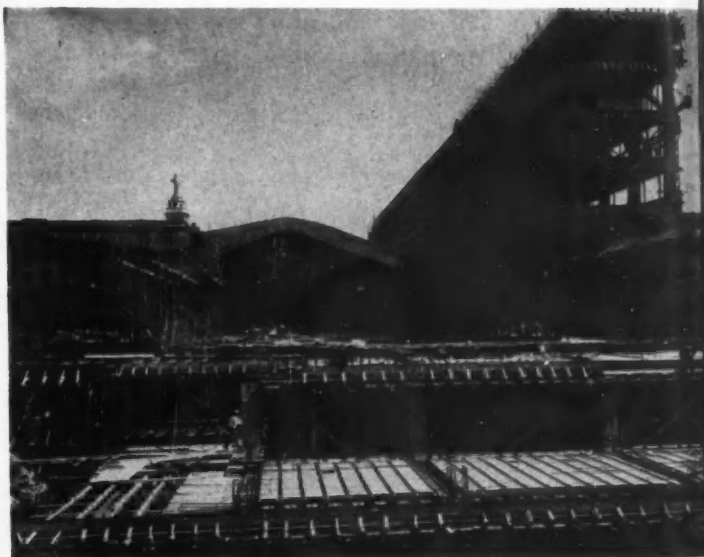


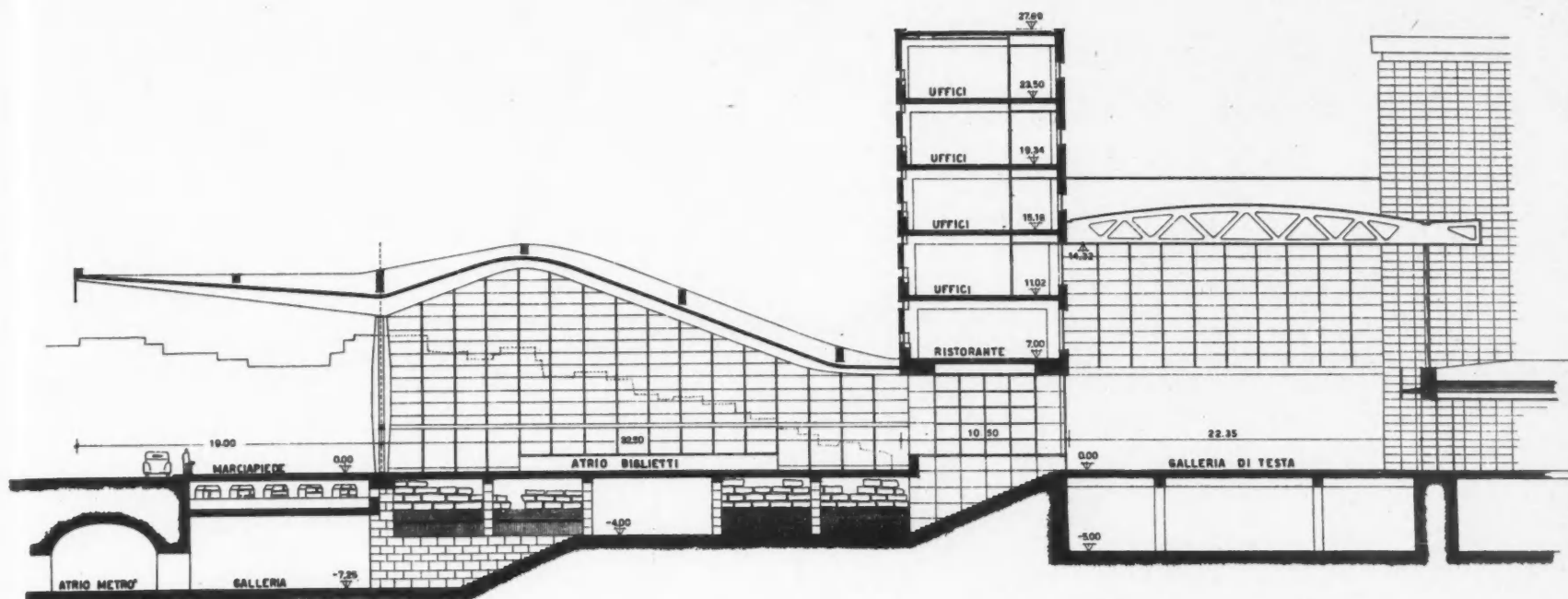
RAILROAD STATION, ROME

Above: The "S" shaped concrete beam construction over the waiting room. Top right: Cross section of the building in construction. Center right: Roof construction over the waiting room with the glass skylight slots between the concrete beams. The preserved Servian wall is shown in the foreground.



Opposite page: Exterior view of the glassed dining room. Interior view of the bar for first and second-class passengers, and side entrance showing earlier construction with the newly added offices in the foreground.





design was to take full advantage of today's materials, to be functional yet to reflect the noble feeling of a public edifice.

The winning architects and engineers in the competition joined to create the existing edifice.

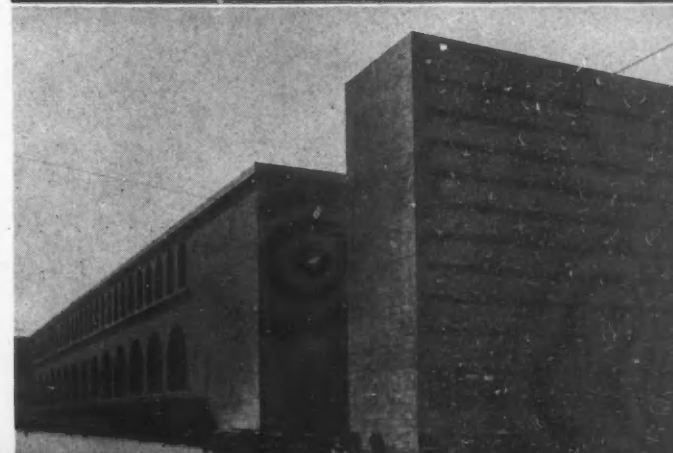
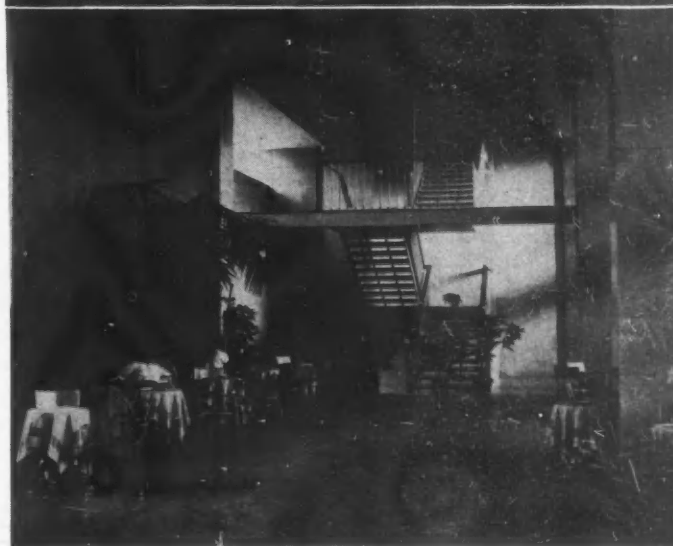
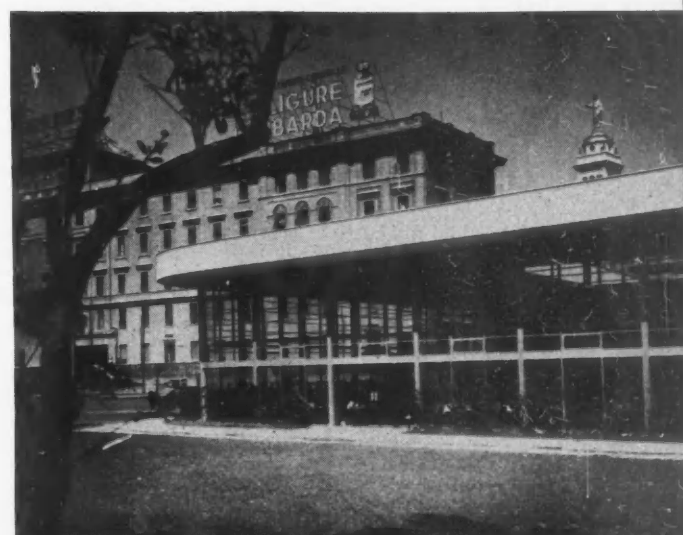
The resulting design contains two major elements: one is the horizontal office building 775' long and 93' high. The other is the entrance and waiting room with its excellently designed S-shaped roof supported by a series of marble-faced tapered columns between which are the entrance doors. Slots in the roof allow for long lines of skylights during the day and for artificial lighting at night.

The horizontal office building is faced with pink granite and travertine to tie in with the existing buildings. It contains a series of nine full-length narrow horizontal slots forming the windows, two to a floor, each 21" high. The floors have hot water-radiant heating, and in addition air conditioning exists for summer use.

One nice touch which is characteristic is the preservation of the "wall of Servian" one of the oldest in Rome, and which can be seen through the huge glass area at the end of the waiting room.

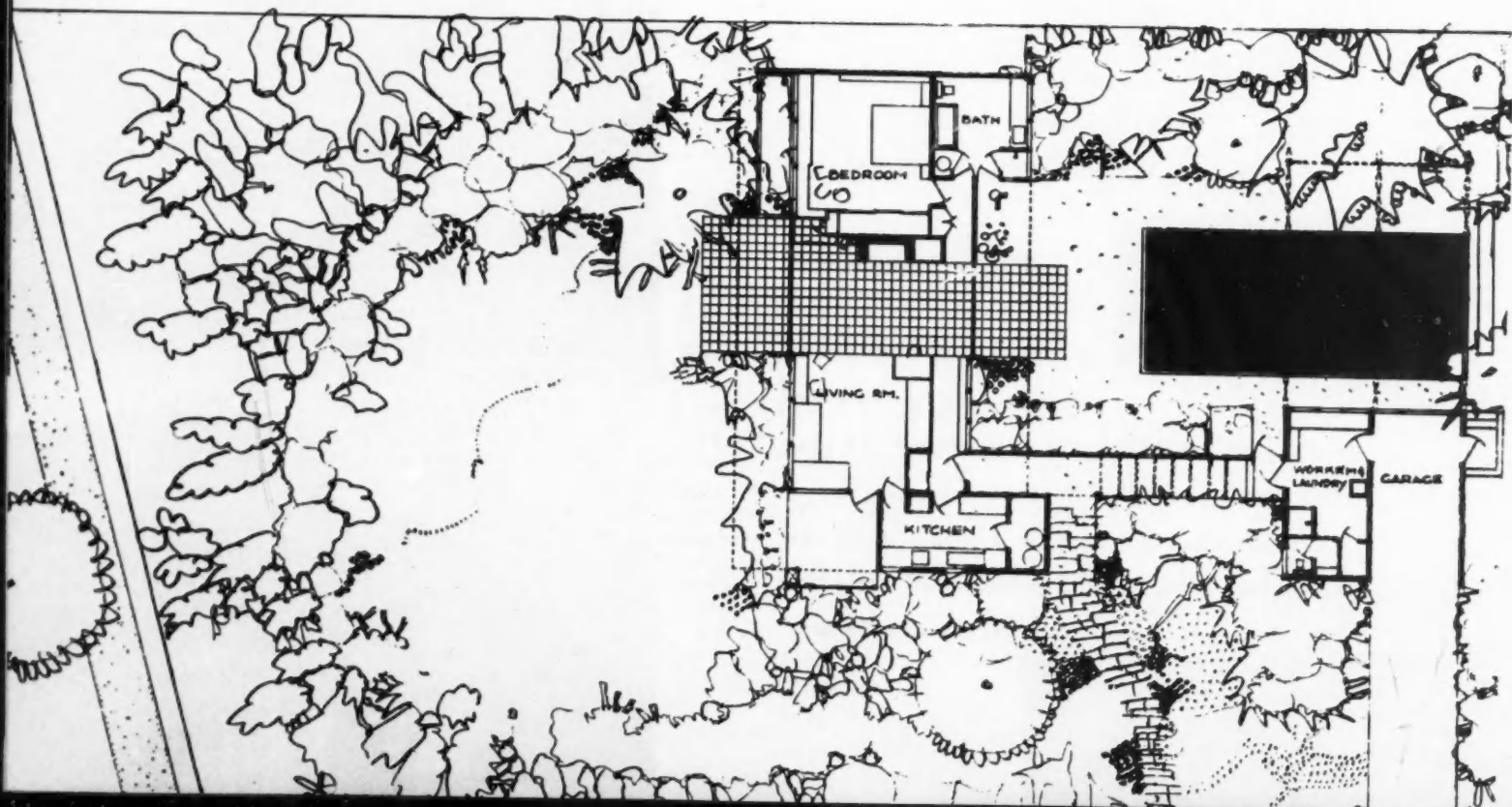
The creators of the new station "hope that their work will express the feeling of their time and still be of a character timeless and Roman."

—H. AND B. ROSENTHAL





HOUSE ON A COASTAL PLAIN BY RICHARD NEUTRArch





The site commands a broad ocean view to the south and overlooks it from the coastal bluff. To the north the highlands of Pacific Palisades are visible. Both streets which skirt the corner property are much lower than the crown of the hill on which the home is erected. Building restrictions required a sloping roof.

The house has a full transparency from south to north with the swimming pool patio on the latter side. The breezeway which forms the entrance loggia and connects with the garage and a workroom, makes a protective screen to shield the swimming pool area against a vista down the street to the east. To give the swimming pool more protection against the northerly neighbor and more the feeling of a semi-interior it is "roofed" by a series of redwood pergola trusses.

The house has a minimum number of rooms but each counts for several purposes. The kitchen at the northeast with its dinette arrangement; the living quarter has a more developed dining area, it is at the same time a music room with built-in piano and a study for the writers. It has a paved area in front of a stone fireplace which forms the centerpiece between the southward and northward paved areas of garden patio and pool. Sliding doors enlarge the space in both directions. A panel opens between living quarters and master bedroom. The dining area, with its upholstered settee turns into a cozy conversation corner of the living room, and extends to a porch on the easterly end of living quarters.

The westerly end of the house is occupied by the master bedroom which with its spaciousness has a counter of storage furniture under the view windows and the master beds are placed to take advantage of the view. The bathroom is easily accessible from the pool area, and will be adjacent to the children's extension.

Exposed beams and sloping roof are in a gray stain to harmonize with the natural stone of the fireplace. The dark lacquer of table and chairs contrast with the bright red of quarry tile paving and the creamy white of plastic upholstery on casual chairs. The interior color scheme has been kept cautiously neutral in order not to interfere with the impressions from the outside: the green of the lawn, the blueness of the distant ocean, and the swimming pool, the color of blooming shrubs and perennial flowers.



PHOTOGRAPHS BY JULIUS SHULMAN

R A r c h i t e c t





M I D - W I L S H I R E M E D I C A L B U I L D I N G

VICTOR GRUEN, A.I.A.
architect

R. L. BAUMFELD
associate in charge

EDGARDO CONTINI
consulting engineer

The Mid-Wilshire Medical Building received wide attention during its entire development stage, since new and important engineering and architectural concepts were introduced.

The problem presented to the architect was to provide a medical office building to accommodate approximately 60 tenants on an inside 57 by 167 foot lot. The matter of adequate parking was of extreme importance. The building was to provide complete air conditioning and the offices were to be uniformly commodious. An unusual feature of the planning problem was that prior to the execution of drawings leases were closed for 82% of the total rental space and, therefore, the suites were to be designed to fit the individual needs of the particular tenants. Because the building was entirely one-purpose, a large amount of equity money was required and cost of the structure could not exceed \$12 per square foot.

The adverse characteristics of the lot made extensive preliminary studies necessary in order to determine the most satisfactory provisions for the required parking, the best feasible ratio between rentable and service areas, and the most economical type of construction commensurate with the building's requirements.

Edgardo Contini, engineer in charge of structural design for the project, was convinced that the considerable reduction of dead loads made possible by the elimination of heavy exterior walls would justify the use of structural steel framing which, ordinarily on the West Coast, does not compete favorably with the most advanced type of reinforced concrete construction for a building of this height. He found that, by developing the lightest type of floor construction (metal deck with 2" lightweight aggregate concrete topping supported by open web joist





PHOTOGRAPHS BY HARRY BASKERVILLE

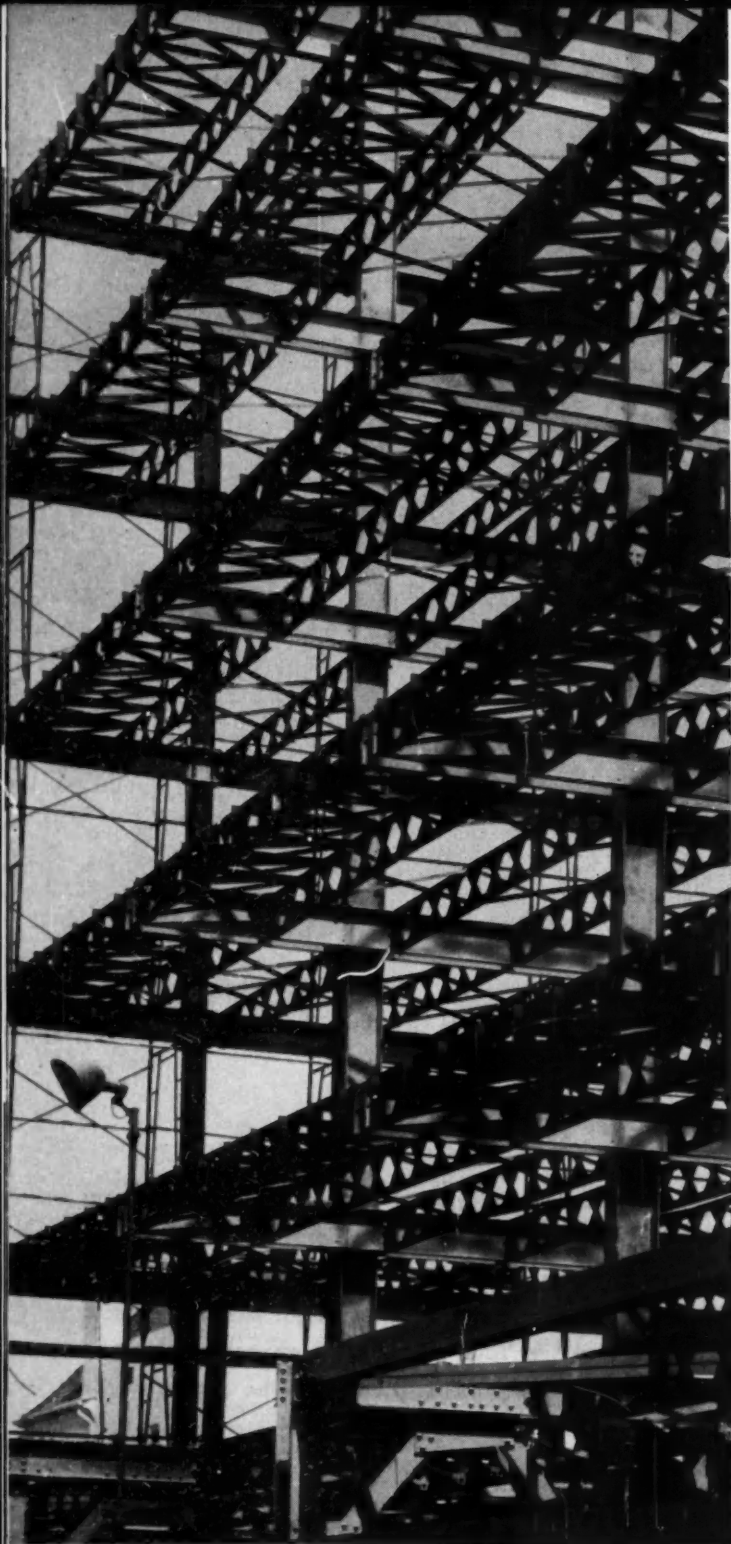


joists); by taking full advantage of rigid frame design; by designing the main wing of the building on the double cantilever principle; and by using welding for all rigid connections but maintaining conventional riveting for all standard connections, an extremely light and economical structure could be obtained. In spite of fairly large column spacing (25'-6" by 25' in the main wing), structural steel for the average floor framing (including girders, beams, joists and columns) weighs less than 9½ pounds per square foot. The structural scheme proved successful, representing a 25% savings in tonnage (and an almost proportional cost savings) over conventional structural steel framing. Erection of the structural framing was completed 5 weeks ahead of schedule.

An additional advantage of the scheme adopted was evident in the fact that it provided greatest flexibility in accommodating pipes for the plumbing system and duct work for air conditioning.

Solving the parking problem with an absolute minimum of sacrifice in land usage resulted in designing of parking completely into the building. The basement and a main portion of the first floor were given over exclusively to it, the two floors connected by a ramp at the rear.

Major attention was directed toward the development of a highly functional and efficient floor plan within the limitations of the narrow lot and its mid-block location. This resulted in the introduction of a single corridor on the east side of the building and yielded the most amount of rentable space (75% of the total area of each upper floor) and allowed the corridor to receive daylight from strip windows in the east wall. Vertically divided translucent glass panels opposite the exterior windows permit the daylight to enter the reception rooms of the individual suites.



PHOTOGRAPHS BY EMIL BECKBY

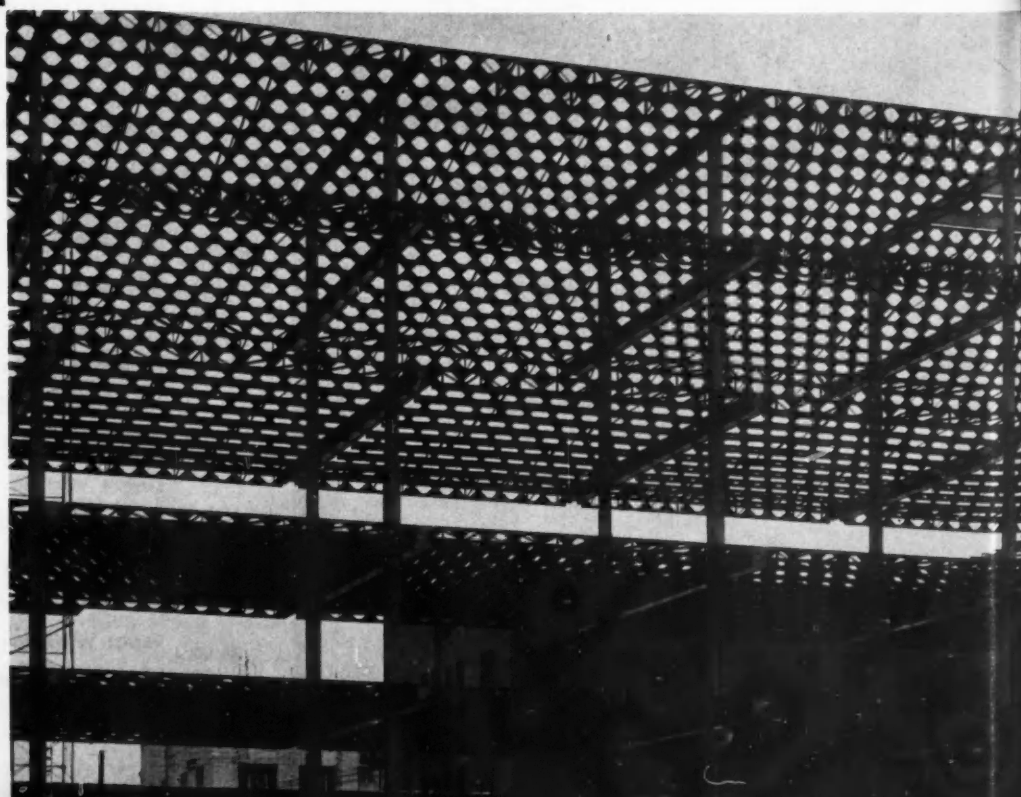
MID-WILSHIRE MEDICAL BUILDING

A number of special features of this building play an important part in the efficient functioning and the architectural effect of the structure: All windows in office spaces along the entire south and west fronts of the building are protected from the sun by means of exterior aluminum jalousies fully adjustable from the inside. These jalousies stop the sun radiation before it can come in contact with the window glass, a critical factor in preventing excessive room temperatures. A corollary benefit is obtained by the reduction of the air conditioning load which, although it has not yet been determined exactly, is substantial.

The solid wall areas of the front portion of the building are formed by pre-cast concrete panels 2" thick which were applied directly to a light grid steel frame (like the metal skin of an airplane). The facing of the panels has crushed stone integrated in the slabs. Other walls are cement plaster and metal lath on steel studs on the sides and a ribbed gunite structural wall at the rear. Gunite was also used in the basement, shot directly against the earth with good cost results.

Utmost use was made of the latest advances in lightweight plaster aggregates such as vermiculite and perlite. Full advantage was taken of the very recent building code revision allowing a single thickness vermiculite plaster and metal lath ceiling to serve as fireproofing of the horizontal framing. Employment of this system resulted in cost reduction while the building maintained a class "A" fire rating.

The interior suite planning presented the architect with every possible variation to accommodate particular requirements of medical specialists. All specialized fields of medicine are represented in this building. Furthermore, almost half the suites required specialized x-ray installations fitted to individual needs. The wiring for these installations was installed prior to plastering and, wherever possible, equipment was recessed in the walls in order to avoid the customary cluttered appearance and space-taking problems of these provisions. The 35-foot deep suites in the entire rear portion of the building lent themselves extremely well to the many variations in layout. The new construction methods minimized the number and size of disturbing columns. By setting back these columns 8'-6" from the exterior face of the building, cantilevered uninterrupted exterior wall framing was made possible.





The use of strip windows on a modular unit length of approximately 4 feet allowed a wide margin of flexibility in the arrangement of the consultation rooms.

Finish materials were selected with great care. At the first floor entry and in the lobby, walls are of glass set in aluminum frames, with travertine covered columns and a natural finished walnut wainscot at the elevators. The lobby and pharmacy floors are terrazzo while the upper floors carry rubber tile. Corridor walls have been painted with a special wear-resistant paint.

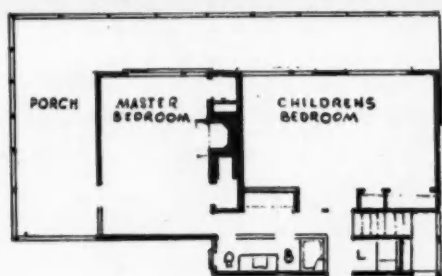
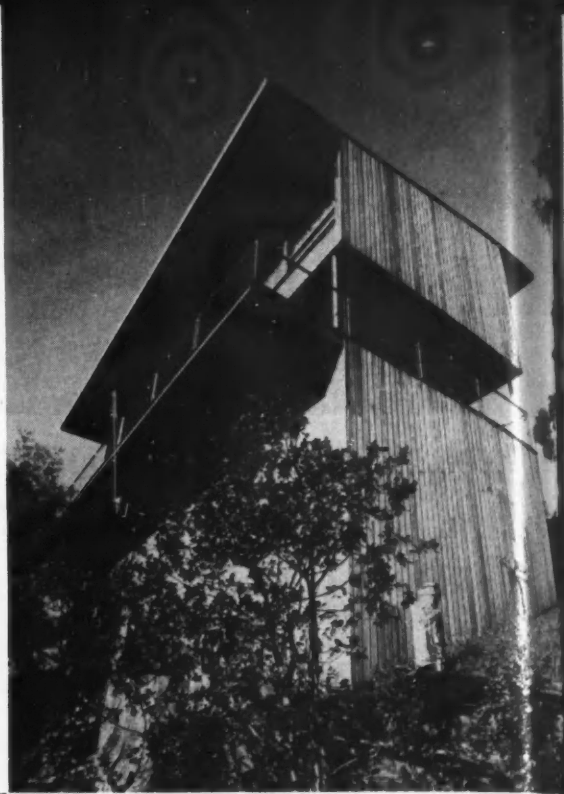
PHOTOGRAPHS BY HARRY BASKERVILLE



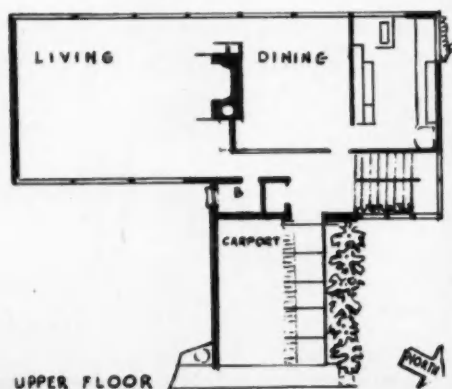


The house is built on a 45° slope, normally considered unsuitable for building. The architect ignored the conventional retaining wall foundation and instead used a grade beam and pier foundation. Beams of reinforced concrete 8" wide and 24" high rest on the ground. Nine piers go down underneath the beams to a firm bearing 7' below.

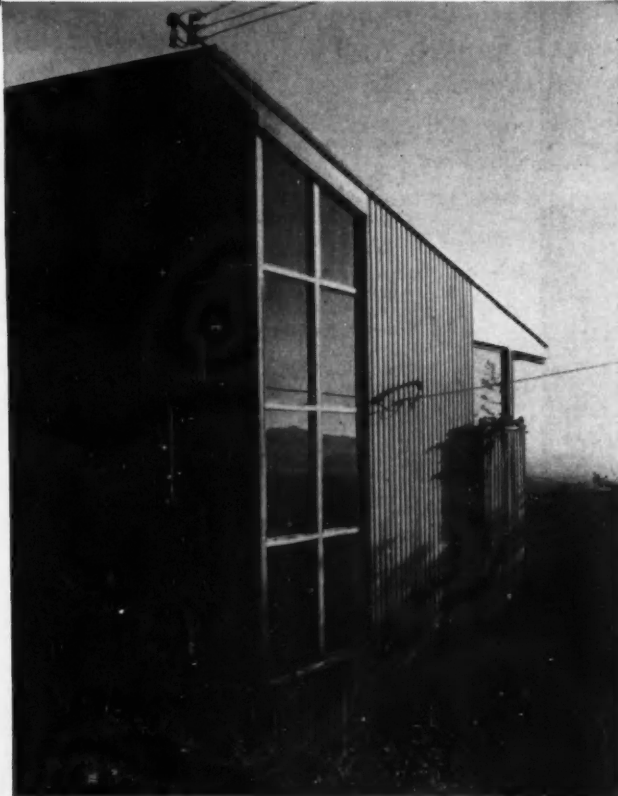
More steel reinforcing was used in this construction but 50% less concrete, reducing the total cost to only two-thirds the usual type of hillside foundation. In areas where there are heavy rainy seasons, hillside houses with solid foundations have been known to slide because of the weight of the loose earth that piles up against the solid wall but in this case the danger is eliminated with the beam and pier construction, for the loose earth is not restrained



LOWER FLOOR



UPPER FLOOR

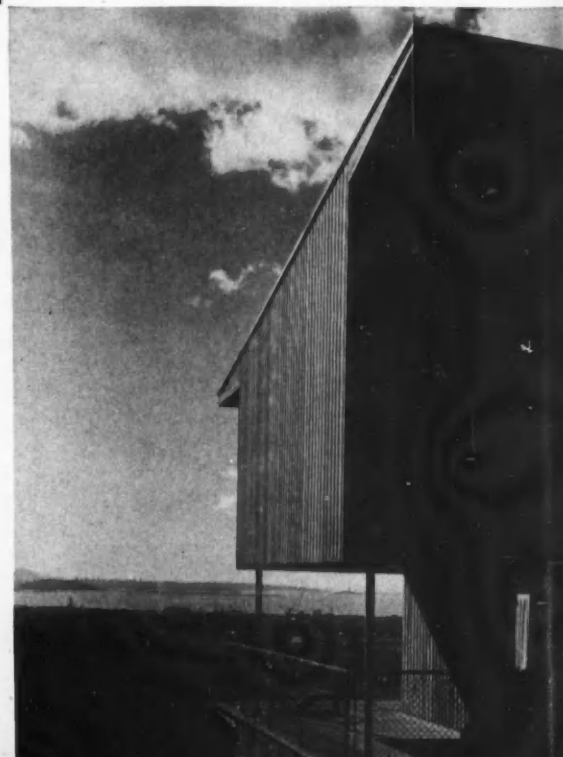


but washes away freely in the spaces between the piers.

A 1/2" plysored (foundation grade plywood) in 4' x 8' panels for walls and rough flooring was used, instead of the usual 1" x 8" sheathing floors and outside walls, laid diagonally. This resulted in a structurally stronger frame and reduced labor and material costs about 20%.

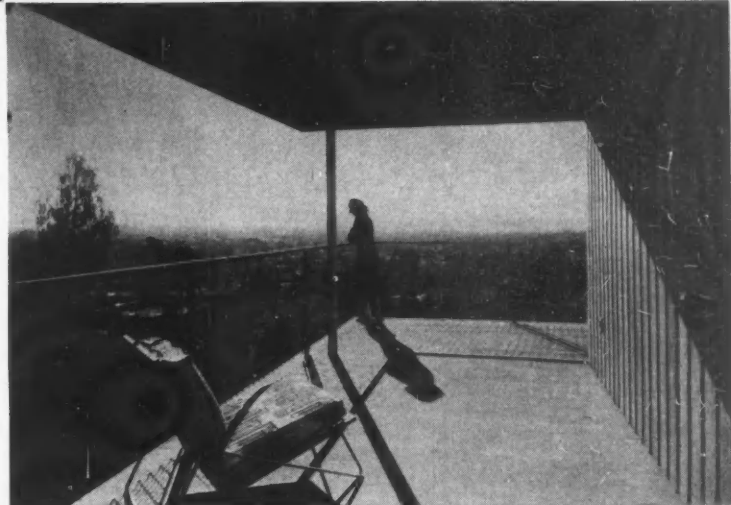
The ceiling on the upper floor is of 2" x 8" tongue and groove white fir roof sheathing left exposed which added to the attractiveness of the interior and further reduced building costs.

The roof parallels the slope of the hillside to take advantage of the view and to reduce sky glare. Extension of the 5' overhang into the house serves two purposes. Esthetically, it achieves the effect of bringing the outside in, creating a pleasant feeling of balance and an interesting break in the interior ceiling line. A cove along the interior edge of the overhanging accommodates indirect light tubes. Practically, it accommodates the 4" in diameter metal



HILLSIDE HOUSE

WILLIAM CORLETT
architect



PHOTOGRAPHS BY RONALD PARTRIDGE



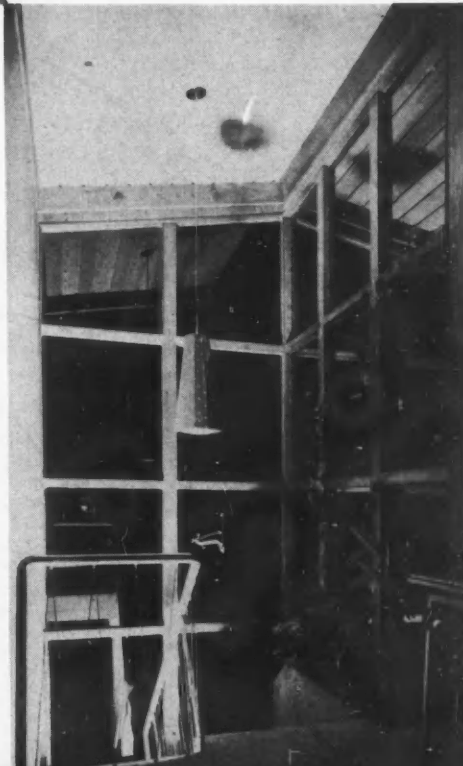
ducts of the "air wall" warm air heating system, and utilizes the system to best advantage. Grilles set in the overhang below warm air along the surface toward windows to heat cold air at the source of the greatest heat loss. The heating system has the further advantage of requiring no floor space for fixtures; additional registers are set in the wall at floor level.

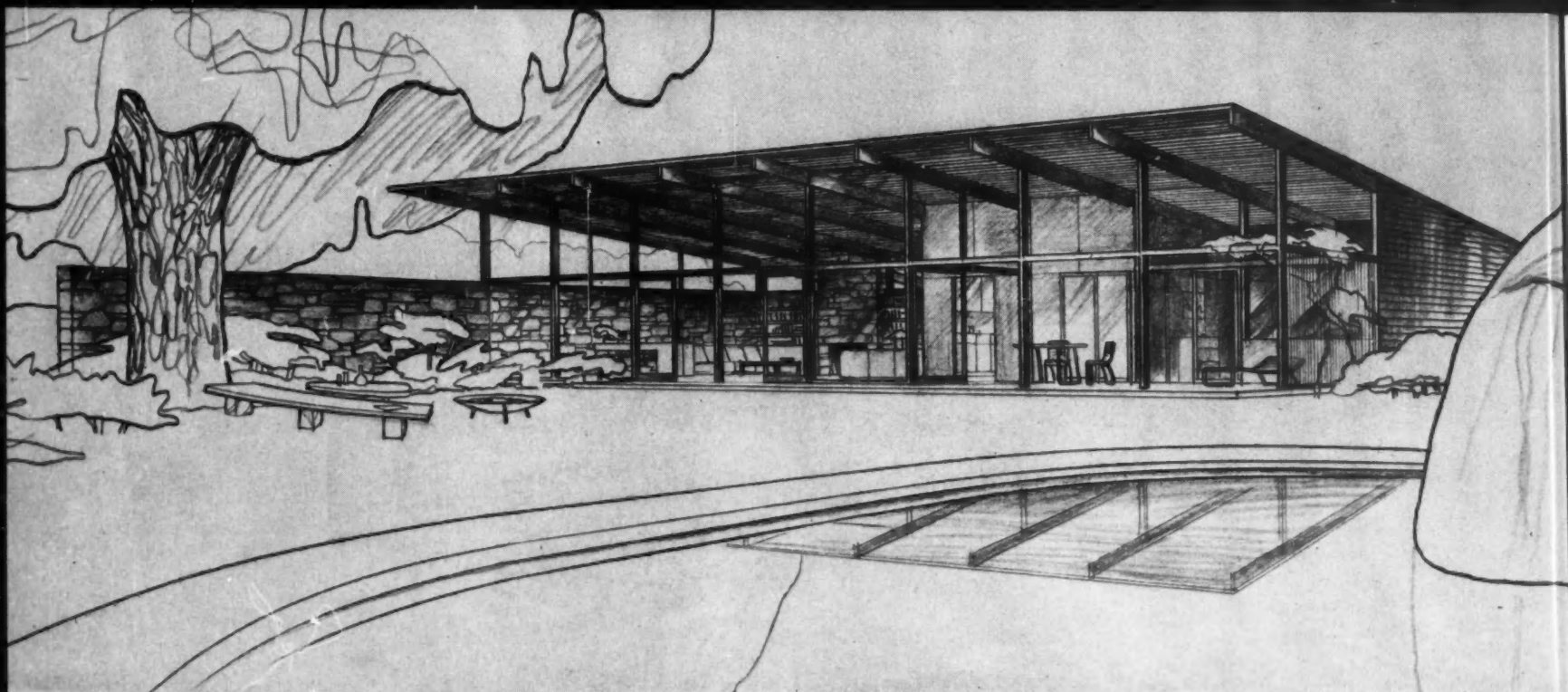
The problem of the steep slope from street level to house was solved with a carport bridge that doubles as an entry-way and is made attractive with a row of planting boxes lining the walkway to the front door.

The stairwell, connecting the street-level living room, dining room and kitchen with the downstairs bedrooms, is a stimulating example of what can be done, economically, to increase the interest of space that fills a utilitarian purpose. Located at the northeast corner of the house, the entire 17' high area is glass enclosed, affording a magnificent view of the city, the Bay, the Golden Gate Bridge and Marin hills.

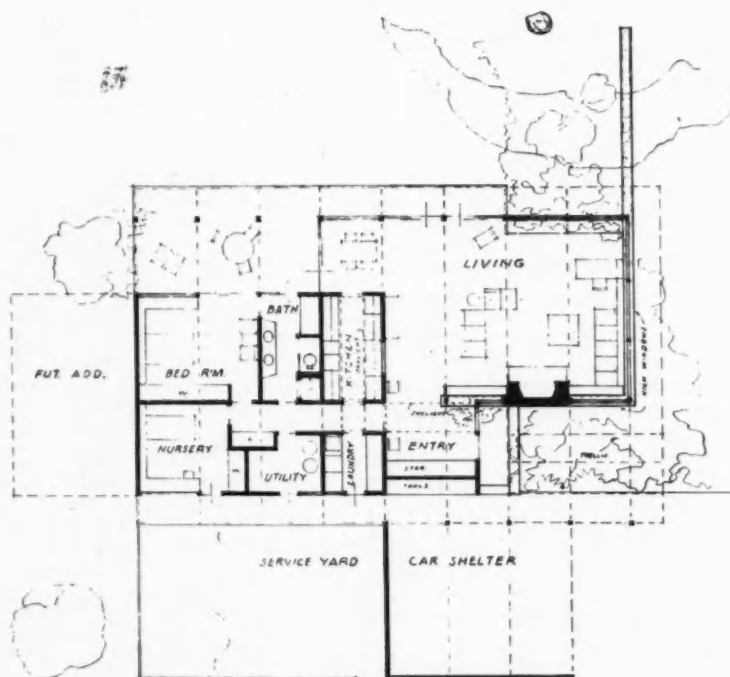
The stairwell is carpeted in chocolate brown and the one non-glass wall is painted a deep forest green. A 1 1/2" steel pipe, enameled watermelon pink, forms the stair railing which is connected to the floor with a protective lacing of woven copper cable. Planting boxes extend out from the upper floor level on the right of the stairs to the between-floor landing.

The copper shade of a custom-designed lighting fixture is pierced with 1/8" round holes to give a soft, diffused light over the entire stairwell area, and the large globe at the bottom makes the landing bright. Three small bulbs are arranged at the top of the fixture in such a way as to light up the ceiling without casting the shadow of the copper suspension tube.





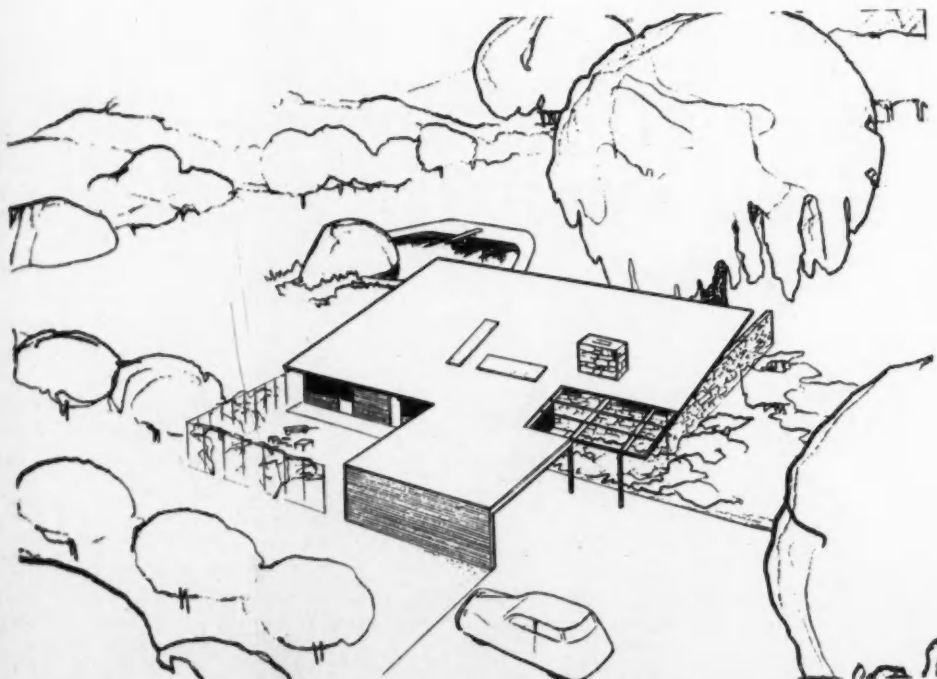
HOUSE IN A VALLEY BY THORNTON M. ABELL, architect



The site of several acres is in the far end of a warm valley at the base of an enormous rock. There are many smaller out-croppings of rocks and several giant oak trees. The prevailing wind is from the street side.

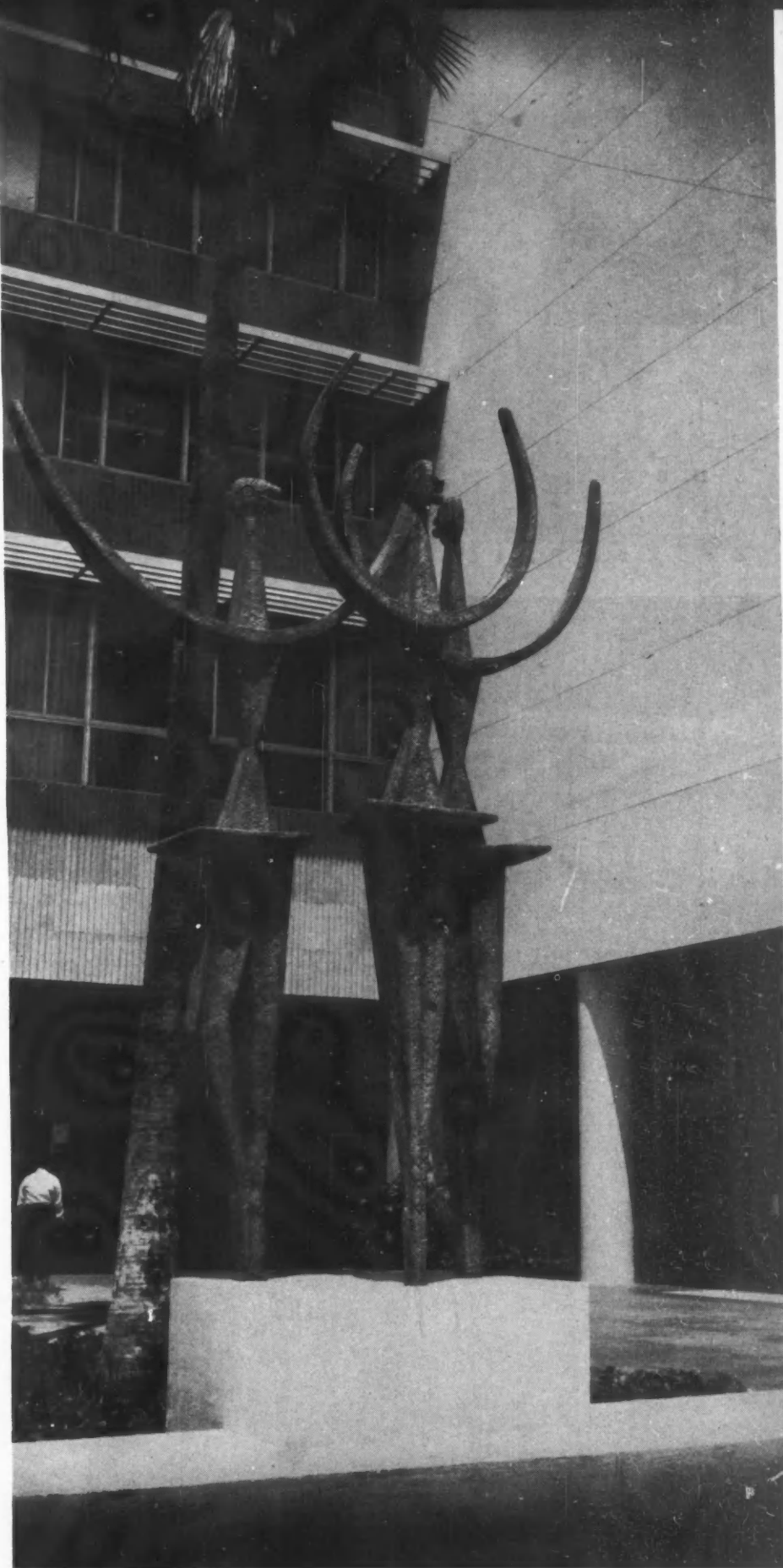
The main living area of the house is designed in direct relation to the great rock and is arranged for the desirable outdoor living under one of the oak trees. The kitchen is actually a food laboratory with a skylight, and dining is either inside or outside. The owner's room and bath has easy access to the pool. An enclosed service yard and play area adjoins the nursery and laundry.

The floor is a radiant heated slab. The wood structure is exposed with redwood siding outside and painted plywood inside. Many of the walls in the living area are of natural stone taken from the site. The roof is a single plane on laminated beams with board insulation and natural color rock surfaced composition roofing. The colors and materials which have been selected are in keeping with the site.





SCULPTURE IN CINEMA



A new motion picture called "Behave Yourself," now being widely advertised as coming from RKO through the Wald-Krasna productions, will be remarkable for a rather unusual look at the work of Bernard Rosenthal, sculptor. Mr. Mac Johnson, art director, facing the problem of choosing a monumental figure around which much of the story was to take place, had the good taste and judgment to acquire from Rosenthal the rights to a small piece called "The Ballet Dancers." In an enlarged replica of about fifteen feet, it was placed in the forecourt of the Los Angeles Prudential Building. The figures were beautifully reproduced and for something over three weeks electrified Wilshire Boulevard traffic. Actually, when removed after the shooting, something very important seemed to be lost to the building itself.

In this case very little sculpture will be found on the cutting room floor because it seems the picture has to do with crooks who use it as a meeting place for the exchange of their various illegalities; a gangster is shot in front of it, a trained dog performs trick signals and money, very hot, changes hands at the feet of the dancers so beautifully making their "pointes."

All this is chiefly interesting because a major popular production used the work of one of the important younger artists.



SUBURBAN HOUSE

BY CAMPBELL & WONG



WORLEY K. WONG, ARCHITECT
AND JOHN CARDEN CAMPBELL

This is a house for suburban living on a luxurious scale, but on a restricted site. A large master bedroom, a child's room, a guest room, kitchen, and maid's quarters. The den is used as an activity room for sewing and studying and on occasion it may be opened to form a large space for entertaining together with the living room and dining room. At these times a concealed bar may be opened from which guests can be served outdoors as well as inside.

Garage, shop, and workyard are located together and used by owner's family in handling yachting gear. The house is placed well back from the street entrance, because of available garage access at rear of the lot. The house was oriented to bring more sun into the living areas and all living spaces open to terraces. Brick, redwood, yellow trim and sash are utilized in a dignified restrained form. The bricks are treated as planes and masses. Outdoor areas are segregated into their own uses by means of high and low brick walls. The garden was laid out in order to emphasize its relationship to the main lines of the house.

Outstanding features of the house include a dramatic entrance with 11-feet high windows, an illuminated pool, and a massive brick wall; the dining room and den both open into the living room and have been interrelated by the use of walnut paneling; unusual spaciousness was achieved in the living room by maintaining the high ceiling of the entrance hall; the den has built-in walnut cabinets containing a fully equipped sewing unit and a typewriter desk; the dining room has floating cabinets for silver and table linens; a sheltered play porch is a connecting link between the child's bedroom and play yard.

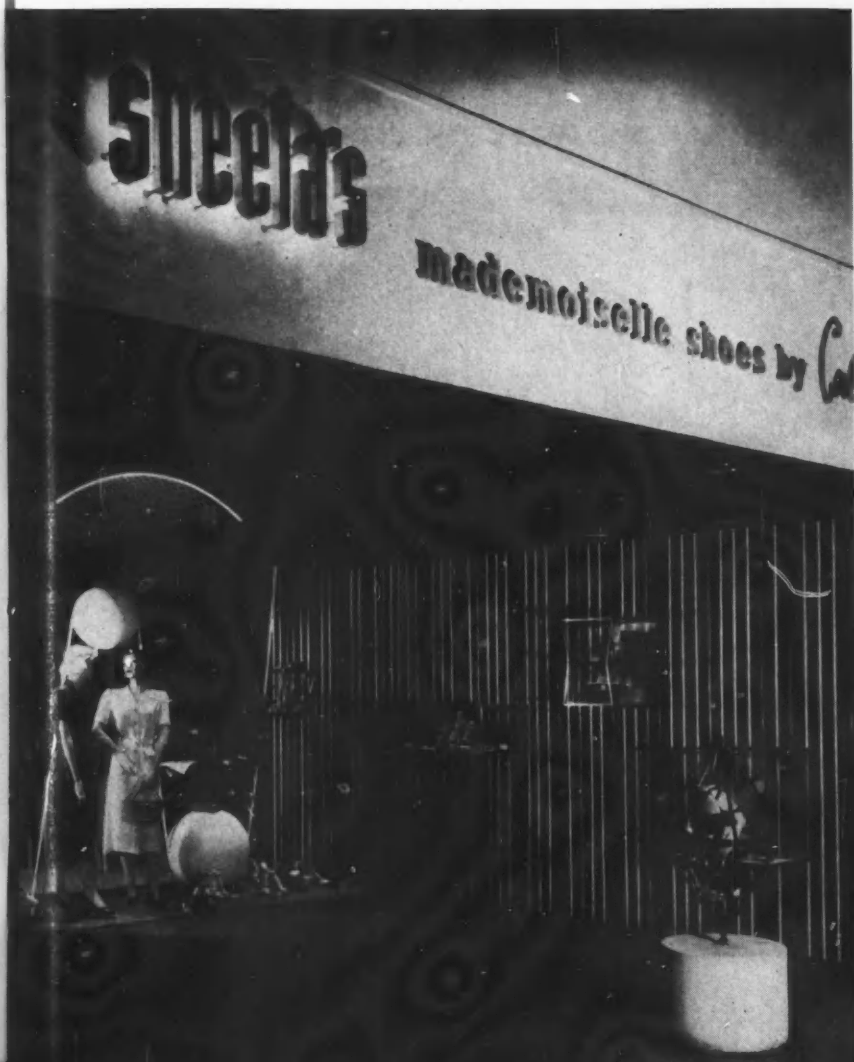


A C C E S S O R Y S H O P B Y A L V I N L U S T I G

Commissioned to do a commercial interior for the display of various tasteful objects, the designer very successfully and very simply achieved a lively and provoking shop.

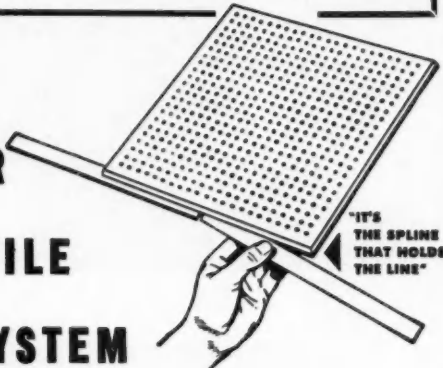
In a long, typically narrow space he has created a kind of light elegance. An entrance wall leading from the open foyer through glass to the interior is stripped vari-colored wood louvres against which glass display cages have been placed. Once inside the dark ceiling gives the illusion of unlimited vertical space. From it on long wire metal rods he has suspended curved perforated screens forming canopies over sections of the shopping area. The shop is predominantly in wood tones and white. The cases are simple structures on bent rod supports. The play of light is so designed that the whole interior becomes fresh and lively and, as was intended, immediately persuasive.

PHOTOGRAPHS BY RICHARD FISH



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continued from page 16

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(964) Bank, Office Lighting: Brochure planned lighting for banks, office; covers recent advances use standard lighting equipment for architectural, illuminating results and influences properly maintained foot-candle levels to improve efficiency, increase working accuracy, add visual comfort; data costs, installation, maintenance; well illustrated; one of best sources information on subject.—Pittsburgh Reflector Company, 452 Oliver Building, Pittsburgh 22, Pa.

•(965) Contemporary Fixtures: Catalog, data good line contemporary fixtures, including complete selection recessed surface mounted lense, downlights incorporating Corning wide angle Pyrex lenses; recessed, semi-recessed, surface-mounted units utilizing reflector lamps; modern chandeliers for widely diffused, even illumination; selected units merit specified for CSHouse 1950.—Ledlin Lighting, Inc., 49 Elizabeth Street, New York 13, N. Y.

(782) Fluorescent Luminaries: New two-color catalog on Sunbeam Fluorescent Luminaries; clear, concise, inclusive; tables of specifications; a very handy reference.—Sunbeam Lighting Company, 777 East Fourteenth Place, Los Angeles 21, Calif.

(119a) Recessed and Accent Lighting Fixtures: Specification data and engineering drawings Prescolite Fixtures; complete range contemporary designs for residential, commercial applications; exclusive Re-lamp-a-lite hinge; 30 seconds to fasten trim, install glass or re-lamp; exceptional builder and owner acceptance, well worth considering.—Pressteel Company, 802 Bancroft way, Berkeley 2, California.

(36a) Slimline Fluorescent: Illumination data, specifications new Collegiate Slimline Fluorescent fixtures; designed for economical, efficient operation in commercial, institutional installations; steps up lightlevels with Duraglo white synthetic enamel finish; single-pin instant starting lamp, no starter needed; piano hinge assemble permits rapid lamp changes; well designed, soundly engineered; overall length 96 $\frac{1}{4}$ ", width 13 $\frac{1}{2}$ "; pendant or pedestal-type mounting.—Smoot-Holman Company, Inglewood, Calif.

(Z7A) Contemporary Commercial Fluorescent, Incandescent Lighting Fixtures: Catalog, complete, illustrated specification data Globe contemporary commercial fluorescent, incandescent lighting fixtures; direct, indirect, semi-indirect, accent, spot; remarkably clean design, sound engineering; one of most complete lines; literature contains charts, tables, technical information; one of best sources of information on lighting.—Globe Lighting Products, Inc., 2121 South Main Street, Los Angeles 7, Calif.

(910) Theatrical Lighting: Smartly designed 48-page catalogue showing best in contemporary theater lighting for

stage, exhibits, window displays, pageants, fashion shows, dance halls, cabarets, night clubs and fairs by Century; lights, special equipment, control equipment, accessories; one of most complete workbooks published, completely illustrated and with prices; this is a must.—Century Lighting, Inc., 419 West Fifty-fifth Street, New York 19, New York.

MISCELLANEOUS

(360) Telephones: Information for architects, builders on telephone installations, including built-in data.—P. E. Dvorsky, Pacific Telephone & Telegraph Company, 740 South Olive Street, Los Angeles 55, Calif.

PAINTS, SURFACE TREATMENTS

(513) Fuller Paints: 23 pages of specifications for paint products featuring Fuller paints, related products; specifications range from best possible to least expensive jobs; one of best prepared specification books available; Available to Western readers only.—W. P. Fuller & Co., 301 Mission St., San Francisco 19, Calif.

(938) Paint Information Service—authoritative, complete—especially for Architects. Questions to all your finish problems answered promptly and frankly, with the latest information available. No obligation. Also color samples and specifications for L & S Portland Cement Paint, the unique oil-base finish for cement masonry, galvanized steel. Used on the West's most important jobs. Write to General Paint Corp., Architectural Information Department, 2627 Army St., San Francisco 19, Calif.

•(925) Portland Cement Paint: Folder L & S Portland Cement paint merit specified for use CSHouse 1950; for concrete, stucco, masonry, new galvanized iron, other surfaces; long wearing, won't absorb moisture, fire retardant; easy to apply with brush, spray; used for 30 years.—General Paint Corporation, 2627 Army Street, San Francisco, Calif.

•(924) Sash and Trim Colors: Folder strong, durable sash and trim colors ground in treated oils; pure, light-fast pigments combined with specially formulated synthetics; won't check, crack, withstands discoloration, retains gloss, flows easily but won't run, sag; good hiding capacity; worth investigation.—General Paint Corporation, 2627 Army Street, San Francisco, Calif.

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•(902) Building Board: Brochures, folders Carco Wallboard, which is fire resistant, water resistant, termite proof, low in cost, highly insulating, non-warping, easy to work, strong, covered with one paint coat, finished on both sides, semi-hard, and uniform; 4'x8' sheets $\frac{1}{4}$ " in thickness; merits close attention.—L. J. Carr Company, Post Office Box 1282, Sacramento, Calif.

•(585) Etchwood Panels: Literature Etchwood, a "3-dimensional plywood" for paneling, furniture, display backgrounds; soft grain burnished away leaving hardwood surface in natural grain-textured surface; costs less than decorative hardwood plywood; entire new product, merits close consideration.—Davidson Plywood & Lumber Company, 3136 East Washington Boulevard, Los Angeles, Calif.



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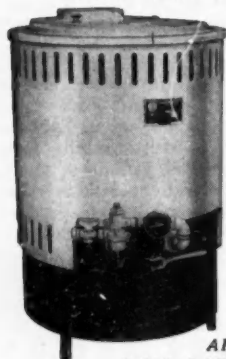
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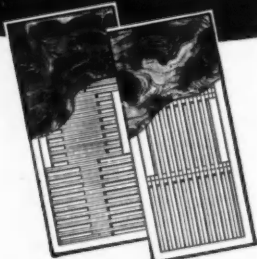
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(826) Bathroom cabinets: Folder bath-
room cabinets, one piece drawn steel
bodies, bonderized after forming; also
chrome bath accessories and wall mir-
rors.—F. H. Lawson Company, Cincin-
nati, Ohio.

(125a) Lighted Bathroom Cabinets:
Complete information Milwaukee fluo-
rescent lighted bathroom cabinet; com-
pletely recessed lighting provides high-
level diffused illumination; entire unit,
including mirror, flush with wall; four
20-watt fluorescent tubes shielded with
Corning Albalite translucent opal glass;
simply designed, well engineered,
soundly fabricated; merit specified
CSHouse 1952.—Northern Light Com-
pany, 2051 North Nineteenth Street,
Milwaukee, Wis.

(55) Water Heaters, Electric: Bro-
chure, data electric water heaters;
good design. — Bauer Manufacturing
Company, 3121 W. El Segundo Boule-
vard, Hawthorne, California.

RADIO AND TELEVISION

(114a) Contemporary Radio-Phono-
graph Combinations: Brochure new
Voice & Vision professional series hi-
fidelity FM-AM radio-phonograph com-
binations with custom-designed cabinetry,
finishes; one of very few lines
meeting requirements of contemporary
architects, designers, draftsmen; tech-
nically excellent, remarkably well en-
gineered; intended for music lovers who
want best in tone, quality, design; data
should be in all files.—Voice & Vision,
Inc., 314 North Michigan Avenue, Chi-
cago 1, Illinois.

(27a) Custom Radio-Phonographs: In-
formation Gateway To Music custom
radio-phonograph installations; top
quality at reasonable cost; wide variety
custom-built tuners, AM-FM, amplifiers,
record changers including three-
speed changers which play consecutively
both sides all types of records; television,
magnetic recorders, other option-
als; cabinets also available; five-year
parts, labor warranty; merit specified
for CSHouse 1950.—Gateway to Music,
3089 Wilshire Boulevard, Los Angeles
5, Calif.

• (948) Record Changer: Literature,
data new Markel 3-speed Playmaster,
only complete 3-speed changer that
automatically plays all speeds and all
sides of records and automatically plays
both sides of 10" and 12" records con-
tinuously in sequence; handles 12
12" 33-1/3 records for total of 9 hours
playing time; remarkably well en-
gineered; this item must for all interest-
ed in sound equipment.—Markel Elec-
tric Products, Inc., 145 Seneca Street,
Buffalo, N. Y.

SASH, DOORS AND WINDOWS

(522) Awning Windows: Brochure
Gate City Awning Windows for homes,
offices, apartments, hotels; controlled
by worm and gear drive operating two
sets of raising mechanisms distributing

raising force to both sides of sash;
standard and special sizes; contempor-
ary design.—Gate City Sash & Door
Company, 15 Southwest Third Avenue,
Fort Lauderdale, Fla.

• (901) Hollow Core Flush Door: Bro-
chure Paine Rezo hollow core flush
door featuring interlocking air-cell grid
core combining the strength of cross-
banded plywood with lightness in
weight; accurately mortised and framed
together, and overlaid with matched
resin-glued plywood panels; one of best
products in field.—L. J. Carr and Com-
pany, Post Office Box 1282, Sacramento,
Calif.

(38a) Store Fronts: Information Nat-
cor Store Fronts; fully extruded alumi-
nated aluminum mouldings and en-
trances; narrow stile doors and jambs;
sturdy, modern; specification data and
engineering aid available. — Natcor
Store Fronts, Taunton, Mass.

SPECIALTIES

(106a) Accordion-Folding Doors: Bro-
chure, full information, specification
data Modernfold accordion-folding
doors for space-saving closures and
room division; permit flexibility in
decorative schemes; use no floor or wall
space; provide more space; permit bet-
ter use of space; vinyl, durable, wash-
able, flame-resistant coverings in wide
range colors; sturdy, rigid, quiet steel
working frame; sold, serviced nationally;
deserves closest consideration.—New
Castle Products, Post Office Box 823,
New Castle, Ind.

(21a) Folding Stairway: Information
EZ-Way Folding Stairway; light pull
on cord brings stairway through trap
door; light push sends it back up;
brings more usable space to homes, cot-
tages, garages; well conceived product
meriting consideration.—EZ-Way Sales,
Inc., Post Office Box 300, St. Paul Park,
Minnesota.

(116a) Packaged Chimneys: Informa-
tion Van-Packer packaged chimneys;
economical; saves space, hangs from
ceiling or floor joists; installed in 3
man-hours or less; immediate delivery
to job of complete chimney; meets FHA
requirements; worth contacting.—Van-
Packer Corporation, 122 West Adams
Street, Chicago 3, Illinois.

(25a) Prefabricated Chimney: Fold-
er entitled "Vitroliner Type 'E' Flue";
functions as a complete chimney for
all home heating equipment; individu-
ally designed to fit the particular roof
pitch of house with tailor-made roof
flashing and flue housing; made of
heavy-gauge steel, completely coated
with acid-resisting porcelain; low ini-
tial cost; installs in two hours, light
weight, saves floor space, improves heat-
ing efficiency, shipped complete in two
cartons; listed by UL for all fuels; good
product, definitely worth investigation.
—Condensation Engineering Corpora-
tion, 3511 W. Potomac, Chicago 3, Ill.



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(973) Quick Setting Furring Cement: Information Acorn Furring Cement; sets wood trim, base, panel furring or floor sleepers to concrete and masonry without plugs, bolts or any other mechanical support; sets trim in straight lines without shims or spacers; solid in 90 minutes; test show high strength. —Acorn Adhesives & Supply Company, 678 Clover Street, Los Angeles 31, Calif. CApolitol 13185.

(23a) Swimming Pools: Well prepared book "Planning Your New Swimming Pool" giving full data Paddock swimming pools; nationally known, widely accepted; one of best sources of information on subject. — Paddock Swimming Pools, 8400 Santa Monica Boulevard, Los Angeles 46, Calif.

STRUCTURAL BUILDING MATERIALS

(933) Custom Stock Store Front Metals: Write for information on Kawneer Custom Styled Stock Architectural Metal Products; Less costly than made-to-order specials; Good products worth thorough investigation.—The Kawneer Company, 289 North Front Street, Niles, Michigan.

(3a) Interlocking Building Block: Information new Hydro-Stone interlocking building block; made entirely from waste materials, eliminates use of mortar; resembles cut stone, granite or marble; made with patented tongue-and-groove design within tolerances of 5/1000"; mastic put on with hand spray gun as assembled insures against moisture; contents include sand, oyster shells, iron ore waste, crushed brick, coal mine tailings, stone dust, or what ever material is most available locally; remarkably inexpensive, worth consideration; manufacturing franchises now open.—Hydro-Forged Stone Asso-

ciates, Inc., 434 Bulkley Building, Cleveland, Ohio.

(712) Sliding Glass Doors: Full information, specification data Arcadia sliding glass metal doors; slide easily, quietly on 2" diameter sealed ball bearing brass sheaves with hard rubber top guide rollers; ample allowance for framing deflection assures continued operation; cleanly designed hardware in bronze or satin chrome finish; accurately fabricated of heavy Bonderized steel; concealed welding; complete package units; standard or intermediate sizes; excellent product, merits consideration. —Arcadia Metal Products, Inc., 324 North Second Avenue, Arcadia, Calif.

(107a) Steel Base Construction: Full information Corruform, 100,000 psi steel base for concrete in joist construction; developed to provide extra-tough, secure steel base maintaining structural principles, structural integrity; corrugated pattern makes attractive exposed ceiling; performs adequately without waste; carries concrete without sag, stretch, bend, leakage; standardized .0156 gauge, 23/8"x1/2" deep corrugations; weight 3/4 pound per square foot with fasteners; good product, merits investigation.—Granco Steel Products Company, Granite City, Ill.

VISUAL MERCHANDISING

(939) Visual Merchandising Presentations: 80-page brochure of metal display and merchandising fixtures; merchandising ideas and suggestion, layouts, presentations, all affording maximum display space in minimum floor area; this is, without a doubt, one of the best manuals of its type offered today.—Reflector-Hardware Corporation, Western Avenue at Twenty-second Place, Chicago 8, Ill.

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ROBERT MOTHERWELL

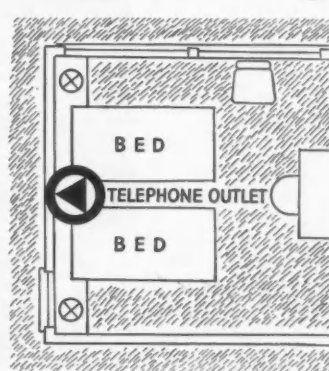
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their previous appreciation of the various modes of realism in painting, I cannot persuade them to return—though they always are at liberty to—to the live model. They say that it gets in the way of their real conceptions. As indeed I believe it does. Some of my academic colleagues tend to be shocked at my students' works, as though I were destroying the students' respect for the past and its traditions! But I think that the students know that their work has so "modern" an aspect in part at least because it has so broader a background of traditional culture, that past can only be recovered genuinely through the needs of the present. Otherwise it remains a series of alien monuments to be forgotten as soon as they walk out into the street. But Piero della Francesca and Uccello are real to them in a sense that they were not to 19th century students; and these modern students realize that what happened was that modern art intervened, that Seurat, Cezanne and the cubist collage helped us recover Piero and Uccello. In this sense, modern art is universalizing and humanizing.

There is a danger to this great augmentation of our plastic repertoire, the danger of a sort of universal eclecticism. To be cultivated and to be creative are not the same thing, though each vivifies the other. But the answer has already been implied. The recovery of the past through present needs teaches us what is relevant. That is, the immediate demands of one's subject-matter determine what is living in past cultures. But the subject-matter of modern art is another topic.

The emphasis here is that much of the seeming radicality of the appearance of modern art derives from its greatly enlarged frame of reference, a frame still missing from the minds of most observers.—ROBERT MOTHERWELL.

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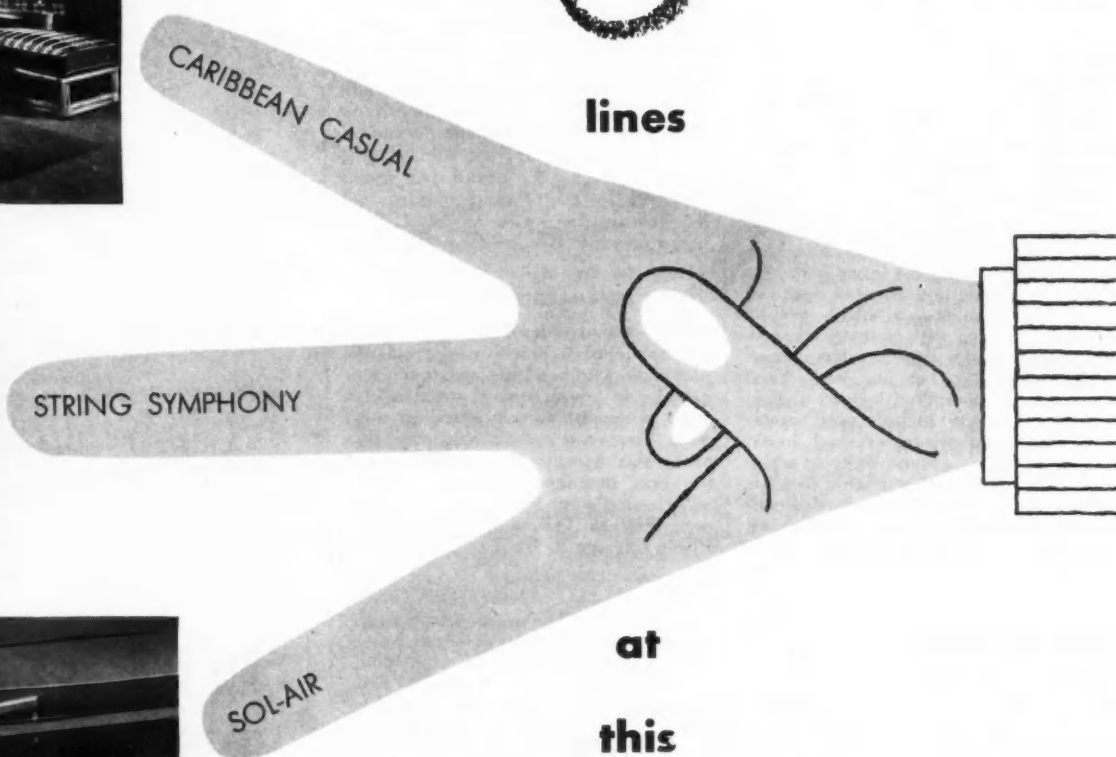


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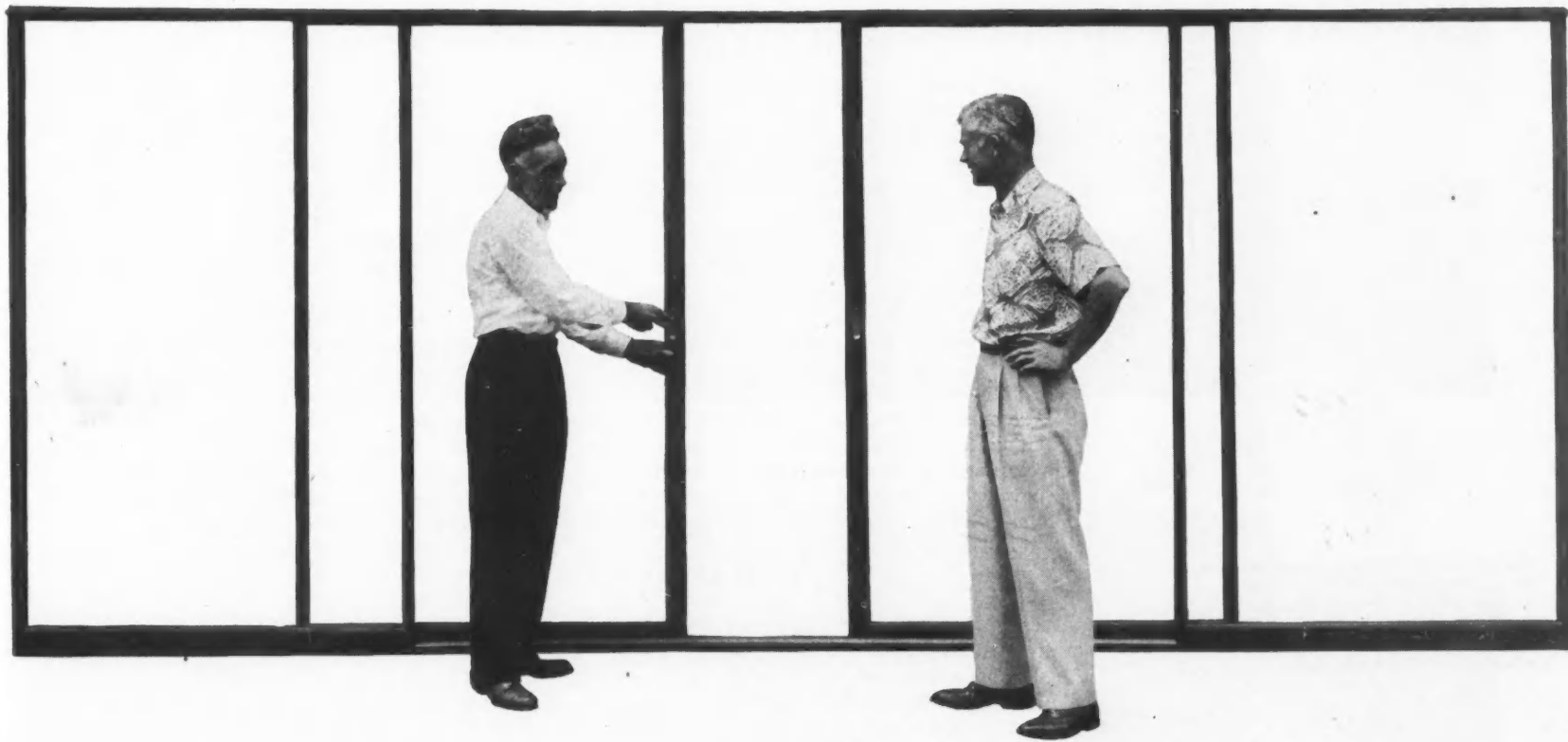
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Sweeping view seen through sliding windows in the Monterey Park residence of Drs. William and Elizabeth Kelpien. Theodore Pletsch, A.I.A., designer.



In product design and engineering no less than in the arts an evolutionary process generally takes place. Its historic milestones can be readily traced.

A highly inventive mind establishes a major departure from preceding concepts and another step forward has been made. The perimeter has been widened. As a result research and development talent has had opened to it a new area within which to perfect details.

The evolvement of architectural design is often in a reciprocal relationship with the development of new materials and products. A new design conception can stimulate the making of a product; and, as sometimes happens, the reverse takes place.

In 1935, for example, the expanded use of glass in walls was already in growing favor with groups of designers. In that year W. C. Watkins presented to California exponents of contemporary design his ideas for sliding glass doorwalls.

The reaction was immediate and enthusiastic, and he was encouraged to begin production. A few architects included the new product in their plans even before manufacture was completed.

Thus began the Los Angeles organization now known as Steelbilt, Inc. of which Mr. Watkins is president and active head of engineering and product development.

Contemporary architecture, it would seem, owes much to the devotion with which this pioneering organization has constantly sought to improve its product. On the other hand, Mr. Watkins is quick to express his indebtedness to architects. The requirements of their creativeness are credited with being responsible for some of the more noteworthy advances made in the design of his products.

In the seventeen years of Steelbilt's existence its products have not only maintained a steady improvement commensurate with new concepts in the architectural profession but they have also gained a wide acceptance throughout the nation. Sliding glass doorwalls were conceived originally to extend California rooms into outdoor living. Because of the mild California climate, patios, and indoor-outdoor living in this area, reception of the products was immediate. With the development of insulation through double glazing, limitations of climate in other areas were eliminated, and now Steelbilt sliding glass door and window units are found in examples of all types of construction in all parts of the country.

In the following pages will be found the story of Steelbilt, its products and its plant. This is another in the Arts & Architecture series concerning products of merit which are of interest to architects and builders.

Shown on the opening page: left W. C. Watkins, President in charge of Research and Product Development; right, Donald J. MacGillis, Vice President in charge of Distribution and Architect Liaison.

ALL PHOTOGRAPHS BY MAX YAVNO
UNLESS OTHERWISE INDICATED

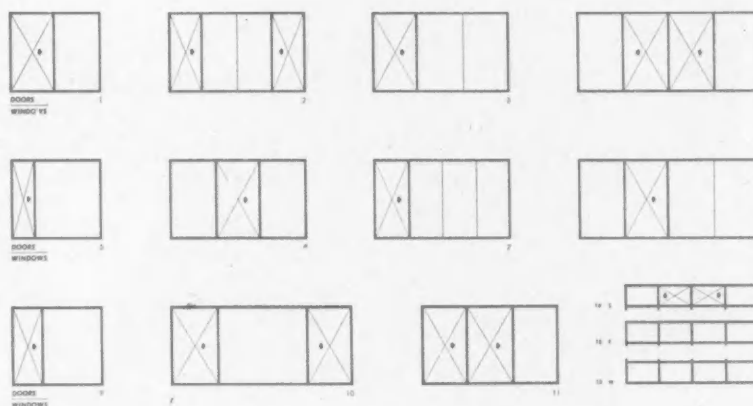
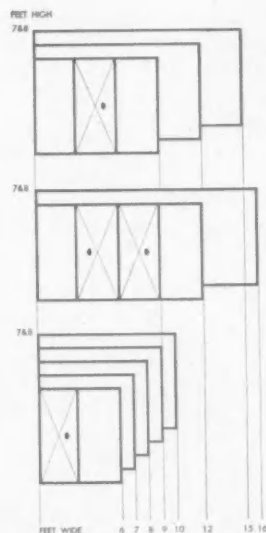
There is a striking absence of mechanization in the Steelbilt plant. High speed production techniques usually associated with American industry are nowhere evident. The pace is leisurely. In the movement of workers, in their handling of tools and materials, the overall impression is one of craftsmanship.

The several massive pieces of equipment seem out of place in an atmosphere reminiscent of a cabinet shop.

It is an understandable anomaly. The relationship of Steelbilt to architects is that of craftsman to designer. While there are basic venting styles for doorwalls and windows, the designer is at liberty to use them in any combination or variation. Neither dimensions nor proportions are fixed. Aside from mechanical components, the products are custom made.

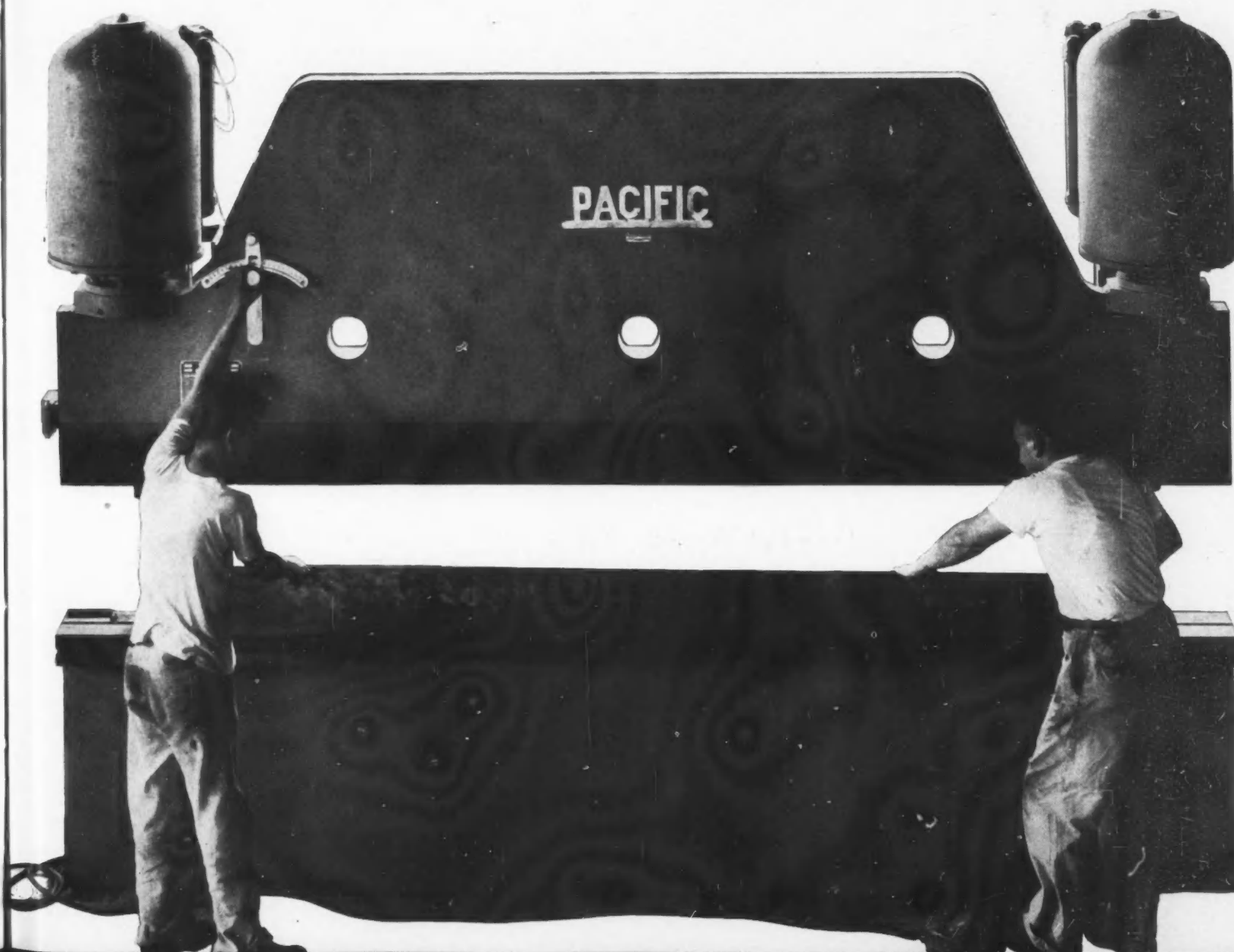
However, an assembly line is being organized for the production of its "Contemporary" series of stock styles and sizes. The new series is intended to meet the demands of designers for more moderately priced contemporary homes.

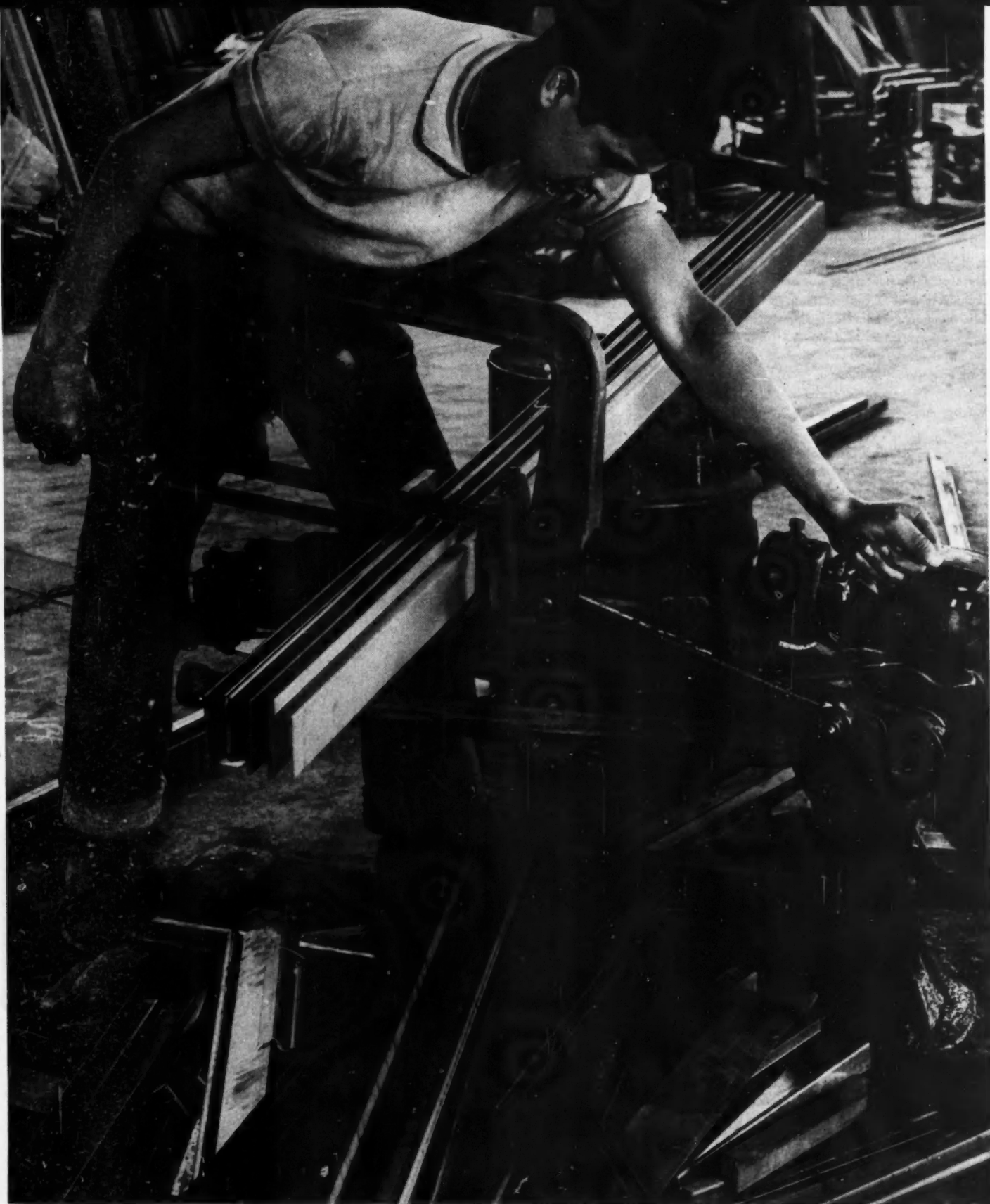
On the right are drawings which illustrate the styles and sizes in the Contemporary series which will be stocked by Steelbilt dealers in all parts of the country. Next to it are shown the ten standard styles, and transom. Hundreds of combinations of these basic styles have been specified by various architects for thousands of installations.



Diagrams above: Left, Stock styles and sizes of the new "Contemporary Series." Right: Exterior view of standard styles of doorwall, window and transom units. Position of vents and their sliding direction may be cross-combined into a wide variety of patterns.

Below: Hydraulic press brake which die-forms components.





Above: sawing fixed bottom door rails to size.

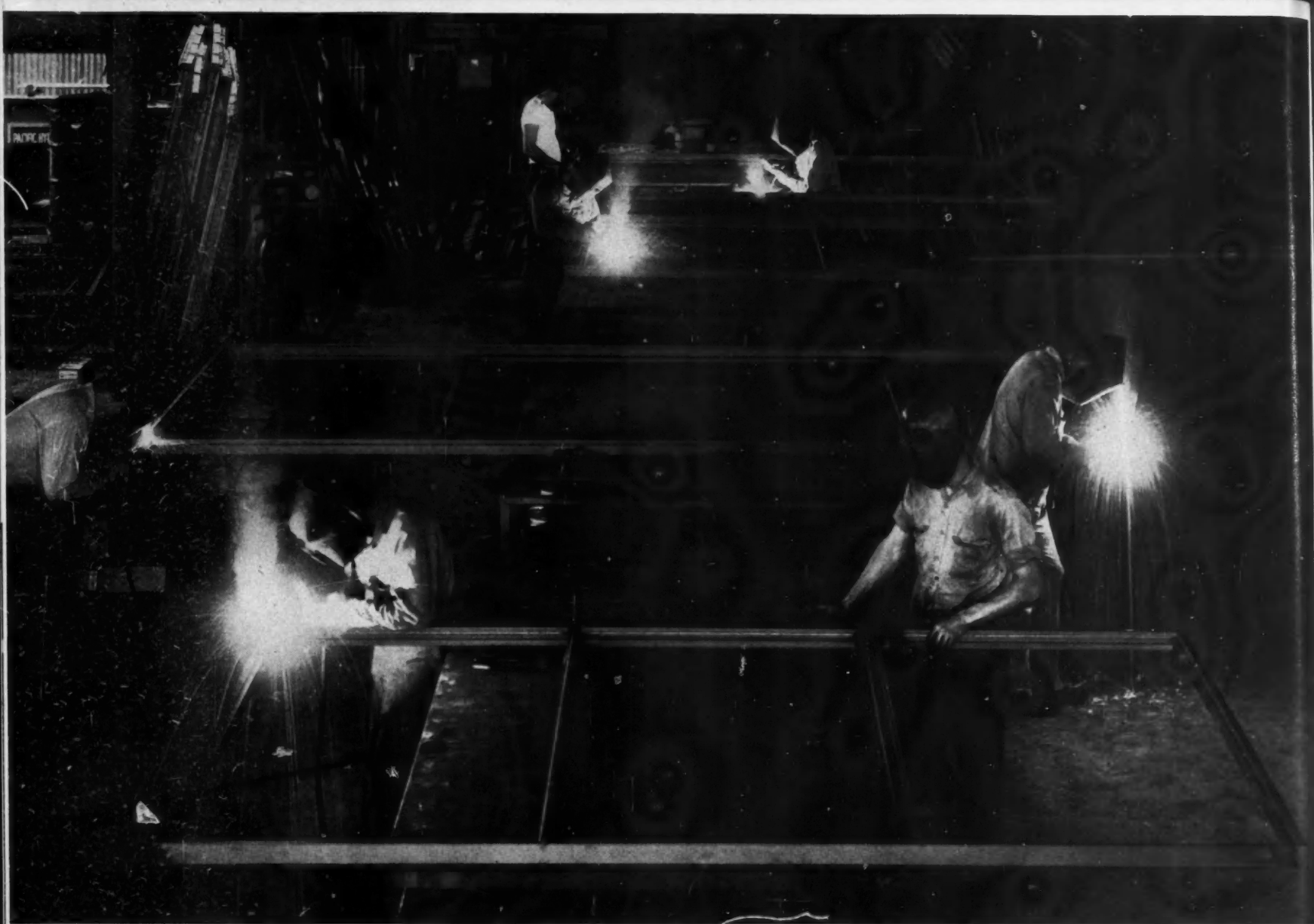
Steelbilt makes the frames into which the glass is placed. Yet the product is spoken of as sliding glass doorwall and window units. This self effacement in nomenclature is significant. It is indicative of a constant striving to make the frame sections less conspicuous.

However, as architects well know, plate glass is heavy so that the sliding sections must be engineered to hold the glass firmly, and the frames must glide easily, softly, without sideways or rattle. These are requirements which must be met.

Upper right: power saw notching of sections for joints.

Lower right: electrical welding of section joints.





Electrical welding of frame sections into a solid unit to give joints a tensile strength as great as the cold-rolled steel itself is a basic essential. In the scene above a battery of skilled welders is at work.

Specifications require surface welds to be smooth so that they are imperceptible after painting. Sparks fly (right) during the preliminary grinding of welds.

Noteworthy among the various manual operations illustrated in the series at the right is the care that goes into applying protective coatings to the raw metal. In the next to last photograph a finish coat of zinc chromate compound primer is being sprayed on the metal surface.

At the extreme right, sections are being hand dipped into the zinc chromate protective coating. Each section is immersed in the compound and rocked so that the rust preventing primer thoroughly covers all hollows and interior surfaces.

When so specified the frames are galvanized after fabrication by the hot-dip process.



Years of research have gone into the development of Steelbilt's exclusive spring action, rocker-type glazing bead. Traditional glazing methods employing putty, rubber strips and rigid vertical moldings were found inadequate.

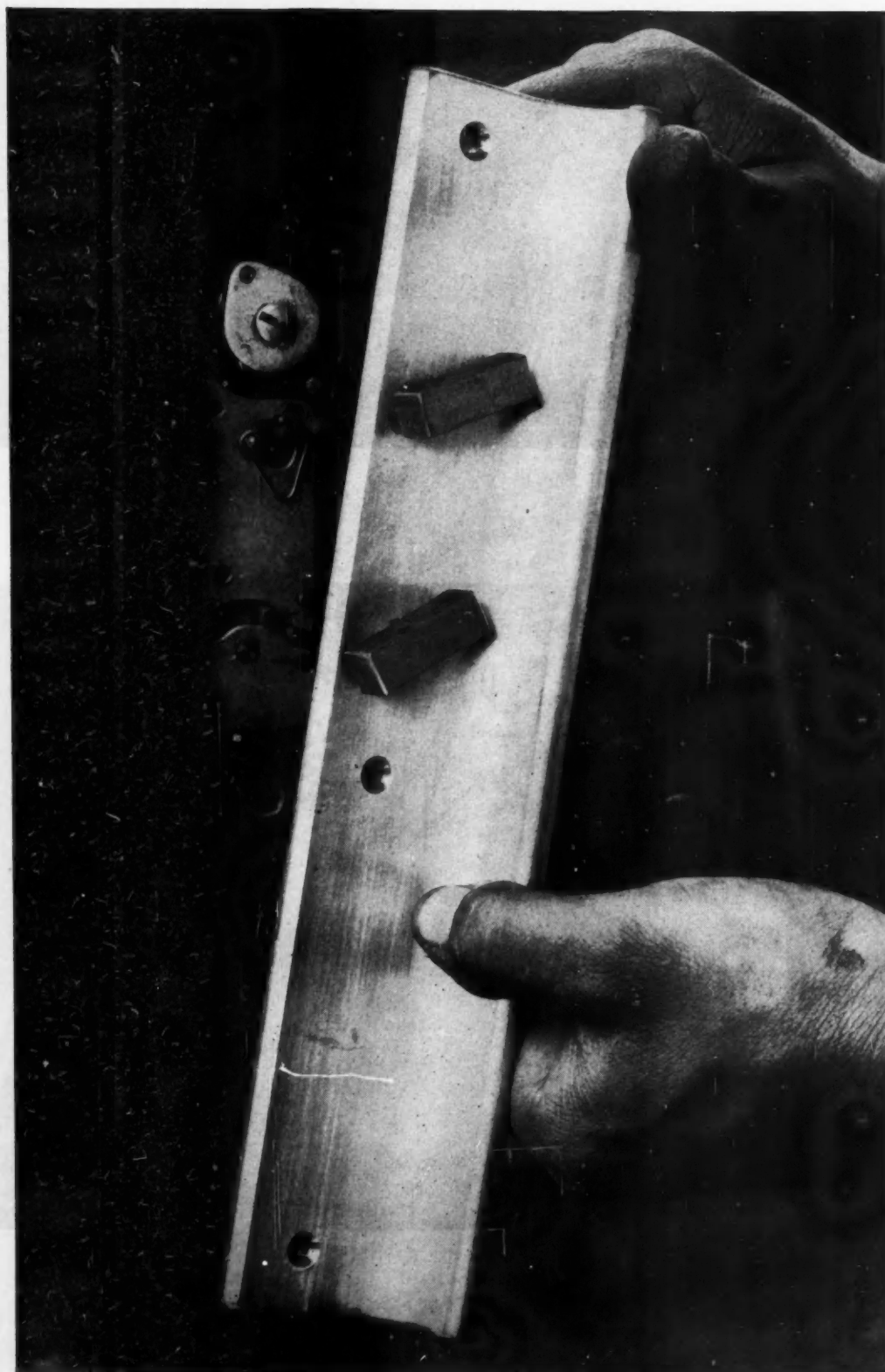
Installation and proper maintenance of large glass areas in sliding frames introduced a complex of factors which had to be solved. The solution is simple and effective. It has attracted widespread interest because of the variety of applications it has for other fields.

Detail drawings and a more complete description of the glazing bead will be found in later pages.

On the right a power driver is used to set the bead into the frame. It will be removed by the glazer and re-set to secure the glass.



STEELBILT INSTALLATIONS



The glazing crew at work (upper right) has had installation time drastically reduced by Steelbilt's glazing bead. When the large light is set into the frame the pre-cut molding bead is dropped into position. Because of the bead's spring action screws are easily inserted (bottom right) through to the frame-threads. As the screws are tightened, the spring action rocker design exerts a constant, distributed pressure which maintains an even back putty line.

This equalized pressure around the glass perimeter provides a permanent molding line without rigidity. The spring pressure will automatically compensate for any contraction in the cushioning material. This assures a permanent seal for the life of the sliding doorwall, and glass rattle or vibration within the frame is virtually eliminated.

Without its glazing bead, "Thermo-glaze" would not have been possible. This most recent Steelbilt product development gives all the benefits of trapped, dry air space insulation, and yet permits frames to be dual glazed on the job.

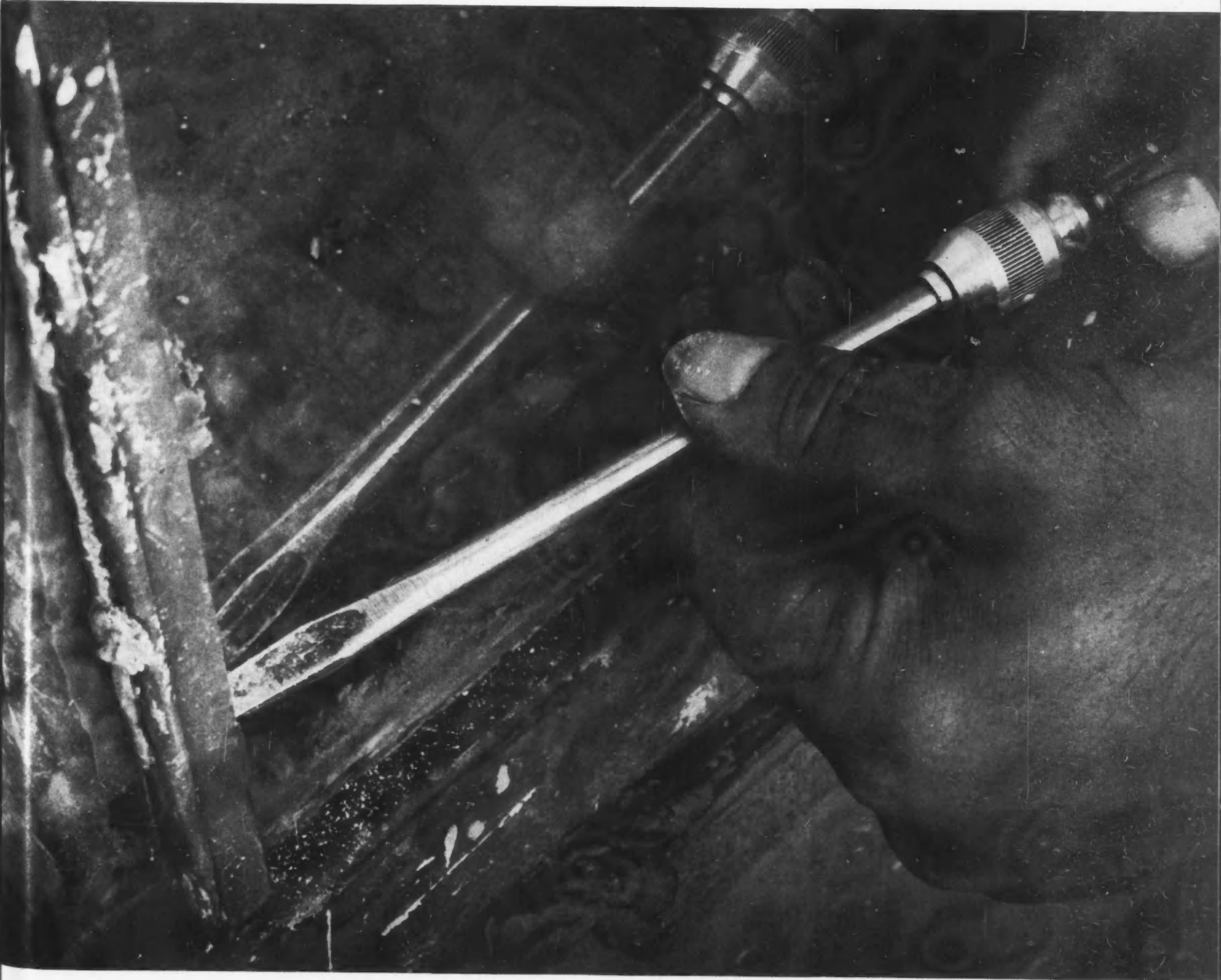
CYLINDER LOCK

After prolonged experiment to achieve narrower mullions, Steelbilt's hollow stile has been reduced to a $\frac{3}{4}$ -inch depth. Out of this achievement arose a new problem. No satisfactory existing lock could be found with a depth small enough to fit into the stile.

Again the company resorted to its own engineering ingenuity. A lock, and hardware to fit, was designed and is manufactured in its own plant (left).

The cylinder lock had to be sturdy and tamper-proof to provide a security equal to that found in larger commercial models. The Steelbilt lock is considered to be jam-proof. It is key operated from the outside, and interior latch-controlled. Accidental self-locking is said to be impossible.

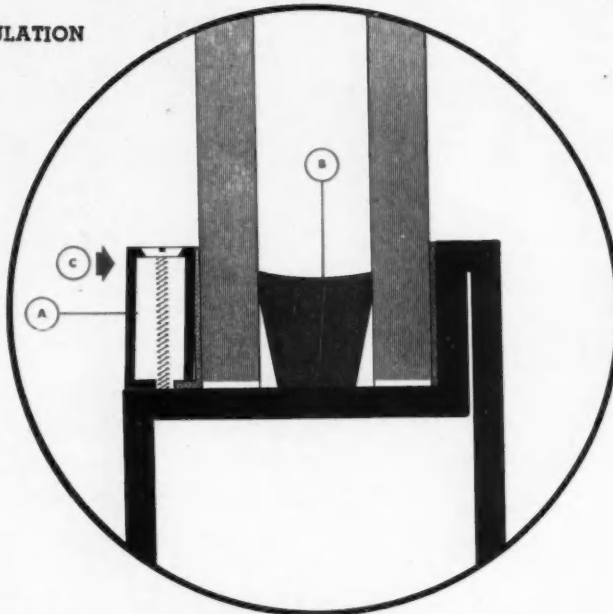
The door handle is solid bronze. To retain the clean contemporary lines of the door design the handle width is limited to conform with the stile and does not protrude into glass area.



THERMO-GLAZE DOUBLE GLASS INSULATION

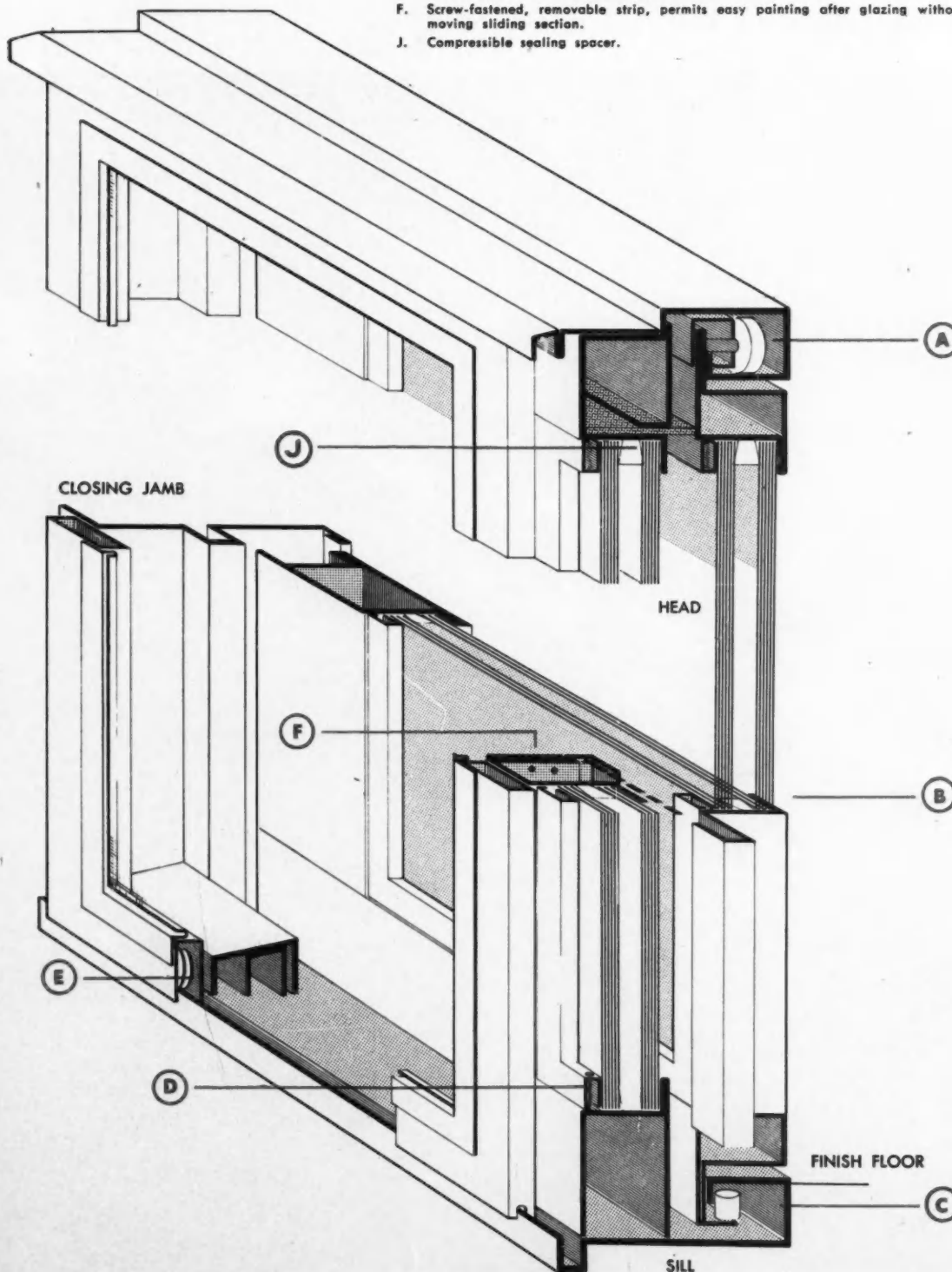
METHOD FOR SEALING TRAPPED DRY AIR

- A. Rocker-type spring action glazing bead.
- B. Compressible sealing spacer.
- C. Tightening of screw exerts bead pressure against cushioning glazing tape. This pressure forces both panels of glass against compressible spacer to form hermetic seal.

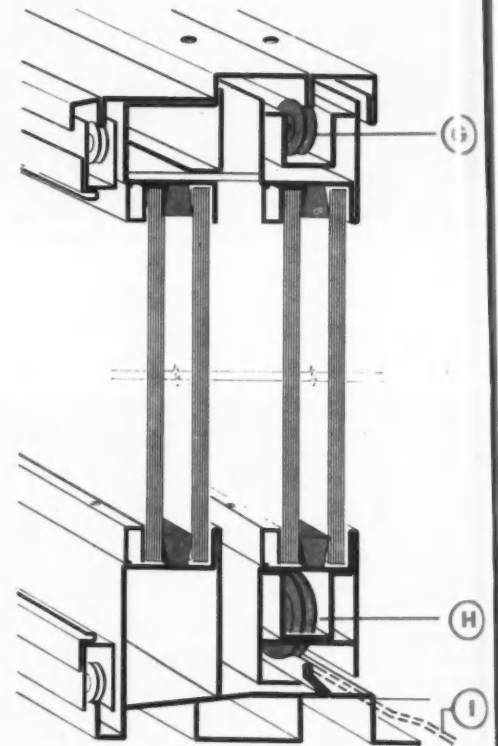


TOP ROLLER-HUNG DOORWALL OR WINDOW

- A. Overhead stainless steel ball bearing with side play prevention.
- B. Narrow interlocking mullion functions without auxiliary weatherstripping.
- C. No weatherstrip needed on leakproof sill design.
- D. Roll-formed steel, rocker-type glazing bead with screw-adjusted, spring action pressure against glass. (Patent pending.)
- E. Factory installed screen tracks for bottom rolling screen equipped with spring-loaded upper roller guides for quick installation.
- F. Screw-fastened, removable strip, permits easy painting after glazing without removing sliding section.
- J. Compressible sealing spacer.



BOTTOM ROLLER DOORWALL: Refer to legend on opposite page for engineering details.



With the introduction of insulation through sealing dehydrated air between two panes of glass, sliding doorwalls have gained greater acceptance, and the barriers of climate have been removed.

There would, however, be obvious advantages if local glaziers could install double glass which would seal a dry air space. After several years of research, experiment and laboratory tests, Steelbilt recently introduced "Thermo-glaze" which permits dual glazing on the job.

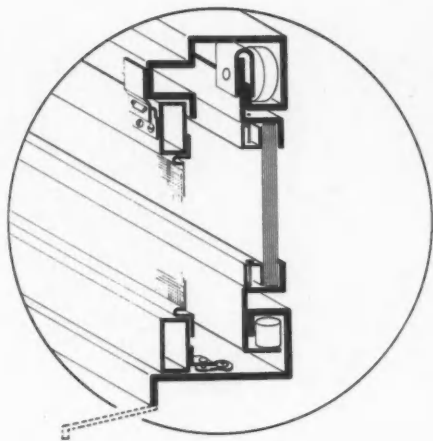
Engineering of the new product was made possible by the rocker-type glazing bead. The method is illustrated in the diagram at the top center of this page.

A simple method controlling dehumidification of the air space has been devised. A porous rack containing silica gel is inserted into the air space by removing a screw-fastened plate from the door's vertical member. Within twelve hours the dehydrating agent does its job. The rack is removed and the air space again sealed by screwing the plate back into position.

Steelbilt has developed equipment for automatic dehydration of larger Thermo-glaze doorwall and window units. A concealed copper tube and fitting is built into the top and bottom of the air space through the vertical member of the door frame. Air is pumped out from between the two panes, passed through a tube of silica gel and returned at the top. Humidity can be reduced adequately within an hour. Patents have been applied for covering both methods of dehydration.

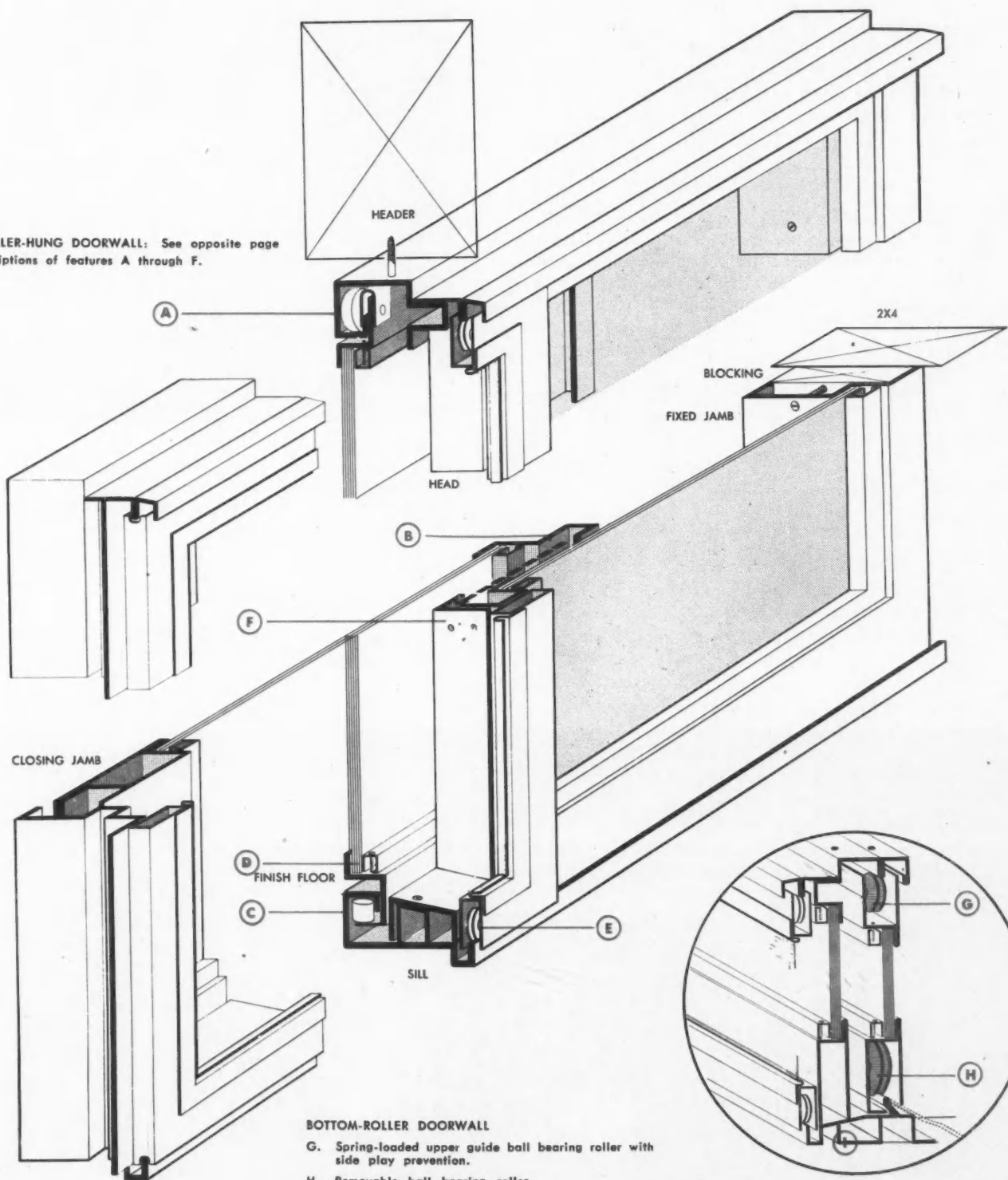
In addition to Thermo-glaze, Steelbilt produces units for Thermopane and Twindow glazing.

SINGLE PANE GLAZING



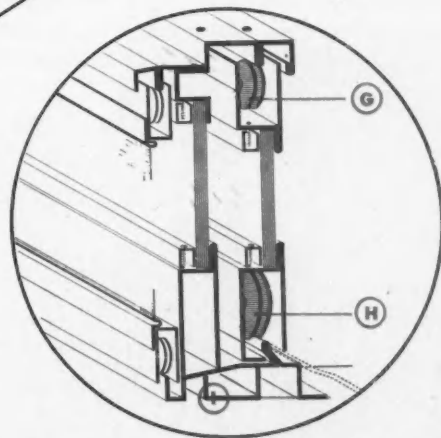
SLIDING WINDOW: Engineering details and features the same as those shown for Top Roller-Hung doorwall below. Dual glazed models also available. See opposite page for details.

TOP ROLLER-HUNG DOORWALL: See opposite page for descriptions of features A through F.



BOTTOM-ROLLER DOORWALL

- G. Spring-loaded upper guide ball bearing roller with side play prevention.
 - H. Removable ball bearing roller.
 - I. Weather seal eliminates maintenance problems. Offset in tracks brings permanent weather seal tight against track.
- (Top Roller-Hung features B through F are included in Bottom-Roller Models.)
- Patents pending.



With all their detail of functional inner workings the steel framing sections remain slim and graceful. A fragile appearance is essential to the designer. This must be coupled with a constant stability of alignment. There should be no sideplay incident to the sliding of doorwall or window units.

Even without other design and engineering considerations sideplay has to be eliminated and mullions kept narrow for perfect mating when mullions interlock at the time doors are pulled to a closed position.

This perfect mating dispenses with vertical auxiliary weatherstripping at interlocking points. No auxiliary weatherstripping is needed with any Steelbilt unit. Sills are weather-tight and leak proof. These engineering features in turn prevent the sideplay and rattle which in time generally result in units when auxiliary weatherstripping begins to wear.

The Steelbilt claim that these units are "solid as a wall when installed" is justified by the careful attention given to the engineering of the numerous details necessary in a precision product.

INSTALLATIONS

In these and succeeding pages are presented a few of the thousands of Steelbilt installations in operation throughout the country. They have been selected more to illustrate the diversity of applications for horizontal sliding doors and windows than as outstanding examples. They are intended to suggest with what freedom of conception designers may plan.

Wherever possible, structures have been identified as to owner, location, and architect.



Above: Case Study House No. 3 sponsored by Arts & Architecture. Mandeville Canyon, West Los Angeles. William Wurster and Theodore Bernardi, architects.

Opposite: Glass enclosed connecting passageway with sliding door-wall entry. W. Parker Lyon residence, Pasadena. Thornton Ladd, architect.

Below: Patio night view. Mrs. J. W. A. Gordon residence, Los Angeles. Sumner Spaulding-John Rex, architects.



PHOTOGRAPHS TO RIGHT AND LEFT BY JULIUS SHULMAN

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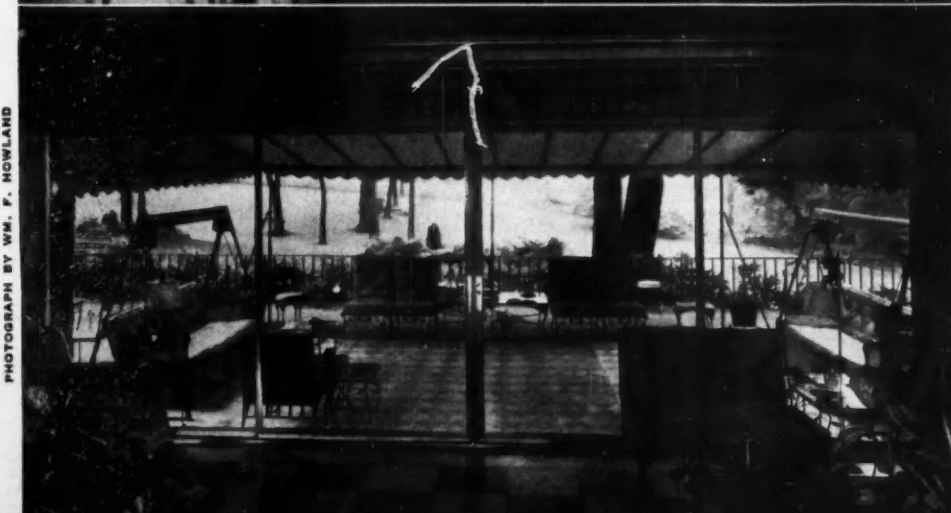
View seen from the living room of the Mr. and Mrs. Richard Stewart residence, North Hollywood.



Residence of Mr. and Mrs. Robert Anderson, Bel-Air. View of living quarters from rear grounds. Sliding glass doorwall and window units have been used extensively throughout. Sumner Spaulding-John Rex, architects. C. G. Deswarte, engineer.



As it looks from the employee cafeteria, Western Waxed Paper Division of Crown Zellerbach Corporation, Los Angeles. Sliding doorwall and window units are used throughout the structure.



Looking through dual glazed doorwalls to terrace of the Mr. and Mrs. William E. Sprackling residence, Hastings On The Hudson, N.Y. Leonard Haber, designer.



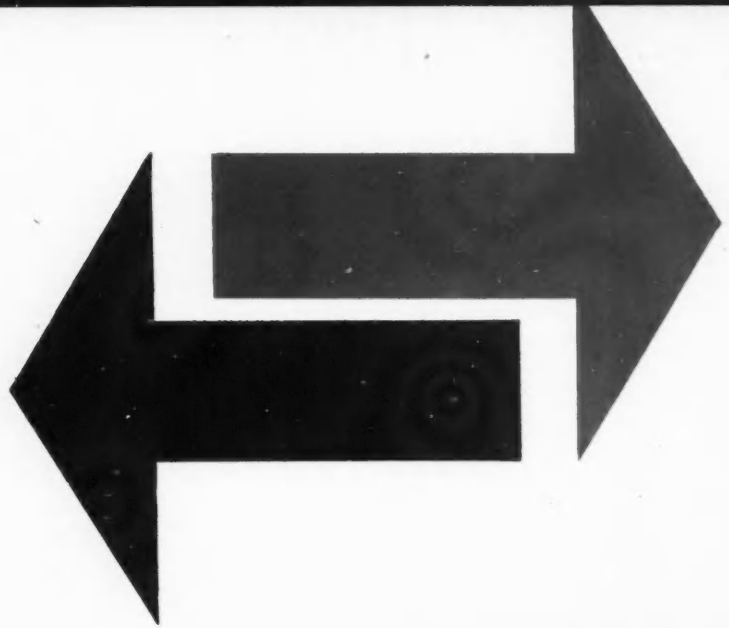
PHOTOGRAPH BY JULIUS SHULMAN

Above: View of the bay from the upper deck of the Mr. and Mrs. Sidney Brown beach residence, Newport Beach, California. Willard Hall Francis, architect.

Right: Looking through doorwalls in a wing of the Mr. and Mrs. Howard B. Collins residence, Salt Lake City, Utah.



STEELBILT AND DESIGN



Jackman & Sons, Inc., Los Angeles. Albert Schwartz, architect.

Many designers have developed effective compositions for exteriors in all types of construction through an imaginative use of horizontal sliding windows. The slender framing sections aid in accomplishing an illusion of continuous bands of glass. The considerable functional advantages are also attracting contemporary architects. Horizontal movement on smooth rolling bearings gives an ease and speed of operation rarely found in the more modern conventional types.

Often peculiar structural conditions surrounding an aperture can be met with horizontal windows where other types offer no satisfactory solution.

Standard Steelbilt window styles and engineering features are identical to those available for doorwalls. The same liberty to cross-combine the various models, styles, and mechanical features is offered.

This flexibility of combination coupled with a capacity to translate the designers' conceptions has enabled Steelbilt to make important contributions to American architecture.



FELMORE SLIPPER CHAIR 503

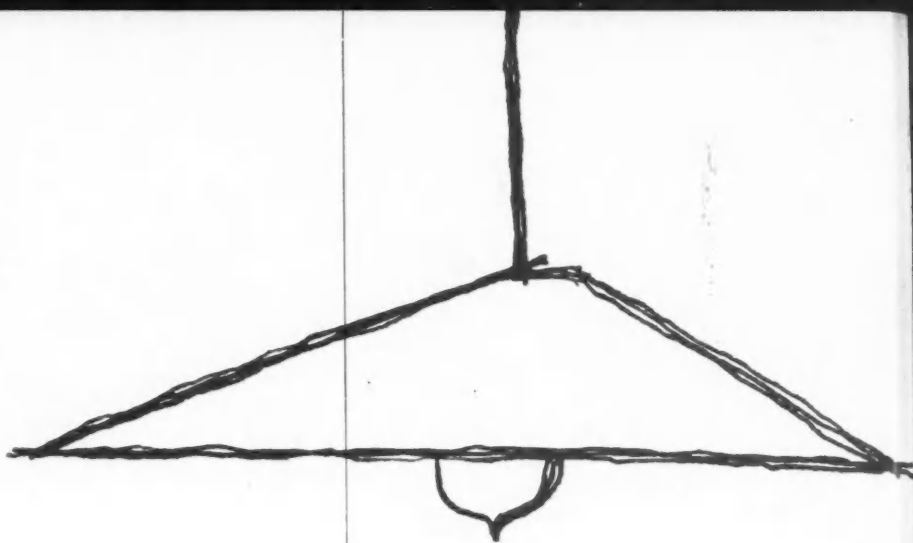
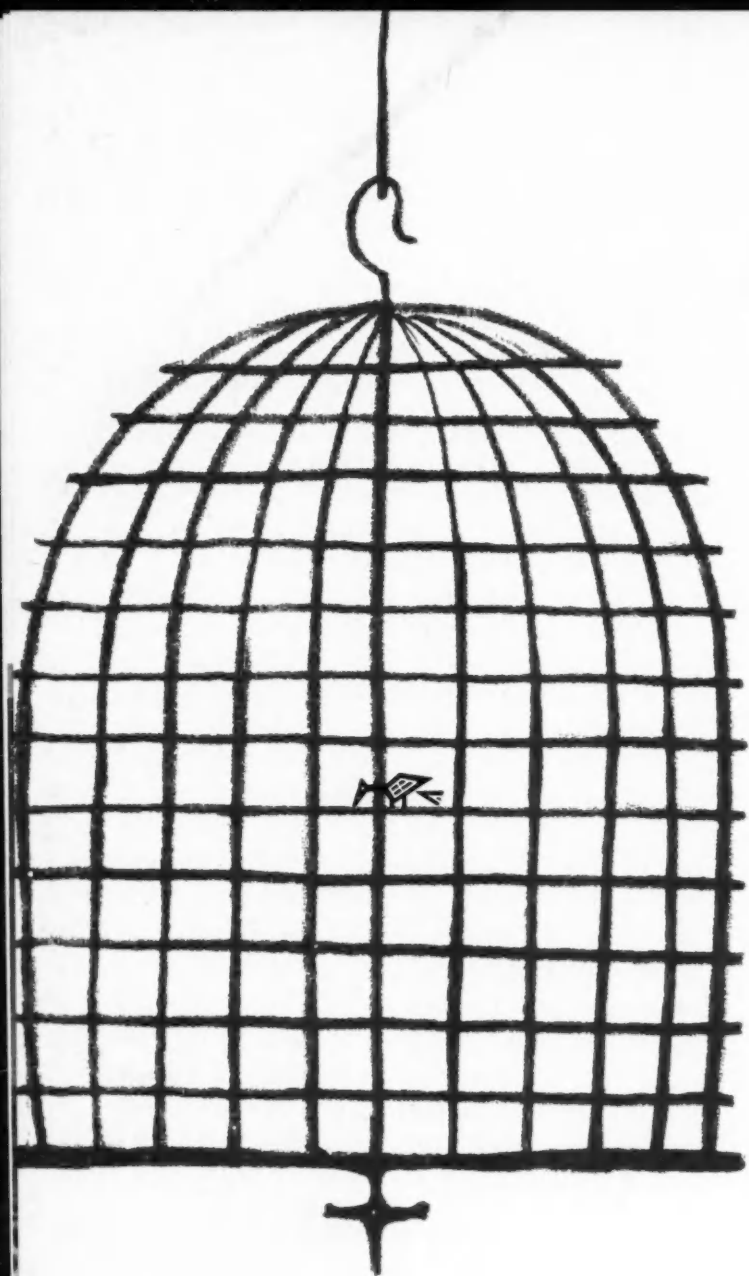
designed by mel bogart

100% foam rubber construction -- metal frame in matte black finish
modestly priced -- professional discounts -- also 2 passenger units



felmores associates

15221 SUNSET BOULEVARD - PACIFIC PALISADES, CALIFORNIA - EXBROOK 4-3791



*Whatever you hang from the ceiling,
put*

KLEARFLAX

on your floor